Evaluation Synthesis: Tobacco Control Programs in Communities of Color

Final Report

SUBMITTED TO:

Vijaya ChannahSorah, Ph.D.
U.S. Department of Health and Human Services
Office of the Assistant Secretary for Planning and Evaluation
Room 447D Humphrey Building
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RTI Project Number 06871.009

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PURPOSE

The purpose of this study was to conduct a focused evaluation synthesis of intervention programs on tobacco control to assess the extent to which Communities of Color are being targeted and to summarize the key findings for Communities of Color.

BACKGROUND

Tobacco control is identified as a high-priority health issue in Healthy People 2010, a comprehensive set of health objectives for the nation published by the U.S. Department of Health and Human Services (DHHS, 2000). In addition, the 1998 Surgeon General's Report, *Tobacco Use Among U.S. Racial/Ethnic Minority Groups,* states that culturally appropriate tobacco control programs must reflect the cultural values of the racial/ethnic group receiving the intervention (DHHS, 1998). These programs must also use strategies that are credible and acceptable to members of the group. Little work has been done, however, to synthesize how state tobacco control programs have implemented and evaluated tobacco control efforts in Communities of Color. Thus, RTI examined recent evaluations of tobacco control programs and interventions to determine the key questions being asked and the findings that have emerged. We investigated plans for future studies and assessed the capacity of states to conduct these evaluations. We also developed recommendations for future evaluations.

We conducted our evaluation synthesis using two sources: the published scientific literature, and state reports and tobacco control web sites for eight state case studies. Our literature search spanned the period from June 1, 2000, to June 30, 2001, in an extension of the recently completed evaluation synthesis of the Task Force on Community Preventive Services (Hopkins et al., 2001). For an article to be reviewed, it had to be an evaluation of an intervention that was (1) directed toward one of the goals of the tobacco program, (2) population based, and (3) targeted toward the general population rather than a high-risk group (with the one exception of interventions involving women during pregnancy). The second source of evidence was electronic and printed documents of key states. The selection of key states was guided by their demonstrated success in reducing rates of initiation of smoking, increasing smoking cessation, or reducing ETS; the presence of large numbers of minority populations or multiple, small segments of racially and ethnically diverse communities; and allotted funds for tobacco prevention and control. The eight states included in our evaluation report are Arizona, California, Florida, Massachusetts, Maryland, Mississippi, Washington, and Texas.

FINDINGS

Two goals of tobacco control programs—prevention and cessation—are adopted by the study states more often than the third goal of reducing environmental tobacco smoke.

All eight of the case study states have adopted the goal of prevention and have or will soon have cessation as a goal. The goal of reducing ETS is common to six of the states.

The size and diversity of the Communities of Color within each state influence the efforts geared toward these groups.

California and Florida are considered to have model programs in their efforts to involve Communities of Color with tobacco control interventions in local communities. California has four statewide ethnic networks serving African Americans, Native Americans, Asians, and Hispanics. Florida appointed a Minority Tobacco Control Task Force in 1999. Interventions in California and

Washington are multilingual, with Washington providing assistance in 44 different languages. Five of our study states—Arizona, Washington, Maryland, Texas, and Mississippi—are in the beginning stages of designing programs that focus on Communities of Color. Less attention is given to race and ethnicity in Massachusetts, however. Its non-Hispanic White population is larger than in the other states (85 percent) but only slightly larger than that of Washington (82 percent).

Published evaluations of interventions pertaining to Communities of Color are few and focus on adolescents.

Our literature search resulted in only 16 studies, conducted between June 1, 2000, and June 30, 2001, that were evaluations of interventions in prevention, cessation, and ETS. Only 6 studies evaluated interventions that involved racial and ethnic minorities or mentioned the participation of these groups (Albrecht, Higgins, and Lebow, 2000; Bauman et al., 2001; Bauer et al., 2000; Hovel et al., 2000; Landrine, Klonoff, and Reina-Patton, 2000; Litrownik et al., 2000). Most of these studies were on interventions targeted to adolescents.

Outcome evaluations of interventions pertinent to Communities of Color are difficult to find.

Within the focused time period of our literature search, few reports on the effectiveness of tobacco control programs indicated whether the overall findings pertained to Communities of Color. Evidence of this finding can be seen in California's and Arizona's state reports of helpline clients. The lack of evidence in outcome evaluations geared to Communities of Color highlights a significant gap in the states' evaluation efforts.

A published evaluation supports the importance of mass media campaigns in combination with other interventions in preventing the initiation of tobacco use in Communities of Color.

The Bauer et al. (2000) study, which evaluated Florida's tobacco control program, provides evidence that state programs with multiple components are effective in preventing the initiation of tobacco use among Hispanic and African American adolescents.

The published literature supports the effectiveness of community education in Communities of Color for smoking cessation and reduction of ETS and is suggestive of an effect in decreasing smoking initiation.

Albrecht, Higgins, and Lebow (2000) showed that a community-based education program with peer support could increase knowledge of smoking effects and lead to an increase in smoking cessation among pregnant teens of diverse racial backgrounds. Hovell et al. (2000) found reduced exposure to ETS among children under age 4 in San Diego County, a racially diverse low-income area, by providing a counseling program for mothers. Litrownik et al. (2000) found a family-directed educational program to be effective in increasing communication in families with fewer children, suggesting a possible impact on preventing smoking initiation.

One study provides evidence that legislation prohibiting sales to minors is effective in all ethnic neighborhoods. However, other studies show adolescents turned to other sources of acquiring their cigarettes.

The evaluation reported by Landrine, Klonoff, and Reina-Patton (2000) found that the California STAKE Act was effective in neighborhoods of African Americans, Hispanics, and Whites when access was measured by attempts to purchase cigarettes. However, evaluations in California's state reports showed little or no effectiveness when access was measured by student reports of difficulty in obtaining cigarettes or by reported change in the difficulty of purchasing cigarettes. Adolescents turned to other sources of acquiring the cigarettes than direct purchase.

RECOMMENDATIONS

We encourage states to include in their evaluation plans a protocol for sampling procedures that addresses the four Communities of Color: Hispanics, African Americans, American Indians and Alaska Natives, and Asian Americans and Pacific Islanders.

These four groups currently represent about one-fourth of the population of the nation; however, this fact could not have been

deducted by studying the findings of evaluations of population-based initiatives in the years 2000 and 2001. A rigorous surveillance and evaluation research protocol that includes Communities of Color is needed if we are to effectively reduce prevalence and initiation among the country's population.

We recommend that states be encouraged to translate their evaluations into formats that are publishable and to disseminate their findings to the tobacco control community.

As an example, the Centers for Disease Control and Prevention (CDC) could sponsor a few pages in a leading journal (e.g., notes from the field in the *American Journal of Public Health*) or use their National Tobacco Control Program State Exchange web sites for states to post evaluations of community-based projects for Communities of Color. CDC's program allows access to information on state tobacco control programs, training, documents, and activities. It is possible that interventions on one population or in one area of the country could be transported successfully to other areas of the United States. Strategies evaluated in one geographic region could be evaluated in another, allowing for comparisons and necessary adaptations. Through this mechanism, states could share evaluation plans and seek other states that might serve as partners in evaluation. By working together, they may be able to address issues of effectiveness of interventions in their local communities and in Communities of Color. Localities that are similar but in different states might potentially serve as control groups for a county in another state, similar to the study by Secker-Walker et al. (2000). Experimental studies with control groups would strengthen research involving Communities of Color that form only a fraction of the larger population.

We encourage evaluators to conduct outcome evaluations in community programs and to ask new questions about interventions to determine their effects on Communities of Color.

We recognize that it is necessary to document the number of people served but suggest that evaluations progress from studying the process to determining the effect of the intervention in the community. State tobacco control offices might need to strengthen their ties with the local community. Local communities might not

have the resources to conduct an outcome evaluation and are likely to need evaluation assistance.

We recommend that more evaluations be conducted that examine secondary data sets.

The National Institutes of Health is encouraging all researchers to include racial and ethnic populations in their studies. All national databases include information on persons by ethnicity and race. These databases should be mined for information helpful in understanding the impact of tobacco control interventions on Communities of Color. For example, evaluators could measure trends in mortality rates of persons of color as a function of their smoking behavior, or compliance to legislation prohibiting sales to minors, either by race/ethnicity or by geographic area.

We urge that an evaluation synthesis be conducted on school-based programs.

All states target prevention that focuses on adolescents in middle schools and high schools. Nevertheless, to the best of our knowledge, the Task Force on Community Preventive Services has yet to publish its evaluation synthesis of these interventions. Because prevention is a priority of tobacco control programs and all of our case study states, this matter should receive significant attention. From our review of state programs, we know that African American students in Florida are attracted to the SWAT program. Are evaluations of this program available in Florida or other states? We know that Native Americans, African Americans, and Hispanics who reside in Arizona are susceptible to peer pressure. Does a program such as SWAT help to strengthen susceptible teens?

We encourage state health departments to support special initiatives of local community programs that contain a rigorous surveillance and evaluation design.

Involving the community in discouraging tobacco use, addressing smoking cessation, and promoting smoke-free environments can empower the community and facilitate the formation of coalitions—a formidable tool in the fight to support tobacco control strategies. An example would be for the state to increase monetary resources

related to the provision of assistance to communities in the promotion of cessation policies.

We recommend the development of best practices of tobacco control for Communities of Color.

This recommendation is based not on the argument of racial disparity but on good public health practice. CDC's *Best Practices for Comprehensive Tobacco Control Programs* (CDC, 1999) recommends funding for statewide programs that can address Communities of Color. However, little guidance is available on the best methods for developing culturally appropriate programs. In addition, evidence reveals that smoking behavior and attitudes toward smoking vary by race and ethnicity (e.g., age of addiction to tobacco, or the belief that one can smoke for a short period without becoming addicted). For example, if Native American and African American adolescents are more likely to believe they can smoke for a short period without becoming addicted (as shown in Arizona), interventions need to address these different needs. Good public health practice calls for the development of interventions that serve known needs and later evaluations of these interventions.

We recommend that more national, state, and local evaluations be conducted using secondary data sets to better understand the impact of tobacco control programs on racial/ethnic smoking patterns.

State tobacco control programs are often multifaceted and include mass media campaigns, community-based programs, telephone quitlines, school-based tobacco prevention education, and other interventions. More research is needed to systematically evaluate the success of these various interventions for Communities of Color. Such research would help program administrators ensure that these programs are beneficial to all.

1 Introduction

For the first decade of the 21st century, Healthy People 2010 has two goals: increase quality and years of healthy life, and eliminate health disparities. To accomplish this, key behaviors are identified and targeted for change. One of the high-priority areas is that of tobacco use (U.S. Department of Health and Human Services [DHHS], 2000); every year over 400,000 people are expected to die from a smoking-attributable disease. Nationwide, that figure amounts to about 20 percent of all deaths (Centers for Disease Control and Prevention [CDC], 1993). To decrease tobacco use in the nation and at the same time eliminate health disparities, it is necessary to implement effective tobacco control programs that are culturally appropriate—programs that reflect the cultural values of the racial/ethnic group receiving the interventions (DHHS, 1998).

Tobacco control programs can work at decreasing tobacco use disparities. Even though Whites encompass the largest number of tobacco users, the highest prevalence rate of adult tobacco use is among American Indian/Alaska Native at 40 percent (DHHS, 1998). Furthermore, Non-Hispanic African Americans have much higher mortality rates than Whites and Hispanics in the diseases associated with tobacco use (CDC, October 2001). It is important that tobacco control programs are evaluated for their effectiveness among all segments of the population, not just among the largest segment of the population—in particular, by the year 2050, when members of minority groups will comprise close to 50 percent of the U.S. population (U.S. Census Bureau, 2000).

To learn what we know about this subject so far, RTI conducted a synthesis of recent evaluation studies of tobacco control programs targeted to Communities of Color. The main purposes of the evaluation synthesis were to

- identify and describe the evaluation studies currently available in the published literature and in the unpublished literature of key states regarding population-based tobacco control interventions in Communities of Color;
- identify the primary questions being asked in the evaluation of population-based tobacco control interventions that target Communities of Color and synthesize the key findings of these studies;
- determine what future evaluations are being planned as they pertain to Communities of Color;
- assess the evaluation capacity (e.g., resources, training, and technical assistance) of the key states to conduct these studies, including the issues states face in building capacity; and
- recommend future studies.

1.1 OVERVIEW OF REPORT

This report presents the findings of our evaluation synthesis of tobacco control programs in Communities of Color. Section 1 describes the purpose of our study and provides an introduction to the approach and methods used. Section 2 summarizes our search of the published scientific literature for evaluation studies of tobacco control interventions. It provides a description of 16 population-based studies and their key findings. In Section 3, we present the results from our search of eight case study states. A description of each state's tobacco control program is provided, along with a description of recent and planned evaluations. Section 3 concludes with a summary of our findings from the eight states. Section 4 presents our recommendations for future evaluations of tobacco control programs targeted to Communities of Color.

1.2 METHODS

Our evaluation synthesis had two components: (1) a search of the published literature and (2) case studies of tobacco control activities in eight states. Several evaluation syntheses of the published scientific literature on tobacco control activities have already been conducted, including evaluations of tobacco control interventions based in clinical practice and more recently an evaluation synthesis of the research on community-based programs. The latter synthesis was conducted by the Task Force on Community Preventive Services, an independent, nonfederal group of national, regional, and local public health and prevention services experts (Hopkins et al., 2001). Their evaluation synthesis covered the period from 1980 to May 2000 and did not specifically address Communities of Color. RTI extended the Task Force synthesis to the end of June 2001. We determined the extent to which the literature provides further evidence in support of recommended best practices that emerged from the Task Force's work and searched for new studies that might add to the body of evidence where it was lacking. We also determined the extent to which the new studies target Communities of Color, identified the questions they address, and summarized their key findings.

The second aspect of our evaluation synthesis was to conduct a search of the evaluation reports and tobacco control web sites of key states. The reports and web sites provide evidence of the importance of evaluation in the tobacco control program under the auspices of CDC. CDC places a high priority on evaluation and recommends that states set aside 10 percent of their tobacco control funding for evaluation.

The eight states included in the study represent a wide range of programs, from well established to new. Some states have representatives of multiple Communities of Color, and two have multiple, small Communities of Color, which is becoming typical in many parts of our nation. In each state we contacted tobacco control staff by telephone to interview them about their programs and any unpublished evaluation studies they may have conducted of the programs or their activities with Communities of Color. We also asked the state staff about any planned evaluations and their capacity to conduct evaluations.

By documenting current efforts, we were able to identify gaps in our knowledge and become aware of problems encountered in addressing the needs of diverse groups. Our findings from the current interventions and their evaluations can lay a foundation and provide direction for future efforts in tobacco control that serve a broad range of citizens.

1.2.1 Methodology for Selection of Scientific Literature

RTI's evaluation synthesis began with a literature search of the time period from June 1, 2000, to June 30, 2001, for evaluations of population-based interventions dealing with (1) preventing the initiation of tobacco use, (2) reducing and eliminating tobacco use, and (3) reducing environmental tobacco smoke (ETS). For an article to be reviewed, it first had to be an evaluation of an intervention directed toward one of these three goals. Second, the intervention had to be population based and not conducted within a clinic or hospital. It could not be a one-to-one consultation between a client and a healthcare provider. Third, the intervention could not be directed toward a high-risk population, such as asthmatic children or heart patients. The single exception was an intervention for tobacco control during pregnancy. We expressly limited our review to outcome evaluations of interventions in the community. A published paper that was simply descriptive of a program or focused solely on process was not given a thorough review because it would not lead to a recommended best practice.

Selection of articles to be reviewed corresponded to the criteria used by the Task Force on Community Preventive Services in the development of their Community Guide (Hopkins et al., 2001). RTI also followed the Task Force's approach for abstracting data from publications using a modified version of their data abstraction form (Zaza et al., 2000). The modified form is provided in Appendix A of our report. Similar to the Community Guide, multicomponent strategies were evaluated, whether or not the relative contribution of individual components could be assessed.

Table 1-1 provides the details from our electronic literature search of published articles. Our search was conducted in five bibliographic databases: MEDLINE® (from the National Library of Medicine), ERIC (from the U.S. Department of Education's Office of Educational Research and Improvement), PsycINFO (from the

Table 1-1. Summary of Literature Search (June 1, 2000, to June 30, 2001)

	Query: Tobacco OR Smoking AND Cessation AND (Intervention OR Evaluation OR Minority)			**Query: Smoking OR Tobacco AND ((Minority, Ethnic, Hispanic OR Latino, Asian, African American OR Black, Alaska Native, American Indian OR Native American, Pacific Islander)**	
	Initiation	**Cessation**	**ETS**	**Program Evaluation OR Prevention AND Control**	**Youth Access**
Initial result	17	200	59	94	24
Articles with interventions geared to minority groups	5	28	3	7	10
Evaluations of the interventions geared to minorities	3	8	1	2	2

Note: Methodology for Selection and Review of Key States

American Psychological Association), CDC's Smoking and Health Database, and the National Clearinghouse for Alcohol and Drug Information's Smoking Database. We only accepted studies that were reported in English and published during the period from June 1, 2000, to June 30, 2001.

The search resulted in 53 articles that seemed promising. Of these, 20 were descriptive in nature, with 2 of the 20 providing background information on tobacco use in Communities of Color. (One described the family's influence on smoking behavior of adolescent American Indians, and the other assessed issues to consider in cessation programs for African American teens). The remaining descriptive articles covered a variety of topics, such as legislation aimed at controlling youth access to tobacco and program implementation, but were not evaluations of interventions meeting our inclusion criteria. Six other articles were evaluations of clinic-based interventions, 5 were of interventions based in schools, 3 were computer simulations, 2 were workplace based, and 1 addressed issues of measuring process, leaving only 16 that were evaluations of population-based interventions. These 16 studies were then abstracted.

1.2.2 Methodology for Selection and Review of Key States

A search of tobacco control literature covering journal and nonjournal sources was conducted on June 15, 2001, to June 30, 2001, on Internet web sites for documents written or published between the period of June 1, 2000, through June 30, 2001. The search was limited to evaluations of tobacco control initiatives pertaining to Communities of Color in the areas of cessation, ETS, and youth access that were conducted in the following eight states: Arizona, California, Florida, Massachusetts, Maryland, Mississippi, Texas, and Washington.

We conducted an electronic search of the eight state health department web sites and their links. In addition, we searched the electronic and hardcopy libraries of RTI's Tobacco Use Research Program (TURP), which resulted in the compilation of 38 state reports and articles. In these searches we looked for unpublished and published documents and did not use any exclusionary criteria.

The selection of key states was guided by

- ➤ demonstrated success in reducing rates of initiation of smoking, increasing smoking cessation, or reducing ETS;
- ➤ the presence of large numbers of minority populations or multiple, small segments of racially and ethnically diverse communities; and
- ➤ funding that targets tobacco prevention and control.

The four states that formed the nucleus of our evaluation report were California, Florida, Arizona, and Massachusetts. These states are known for their tobacco control programs, and three of them have more than one Community of Color. Massachusetts does not have a single, large racial or ethnic population but does have a combination of ethnic and racial groups that comprise 18 percent of its population.

Tobacco control programs in Arizona and California are funded by excise taxes; Massachusetts is funded by tobacco settlement agreement funds and excise taxes; and Florida has funds from its settlement agreement with the tobacco industry. In addition, all of the states receive funds from CDC (see Table 1-2). The other study states included Maryland, which has a fledgling program; Mississippi and Washington, which have well-funded programs; and Texas, which has a strong pilot program. Mississippi and Texas, like Florida, have their own settlement with the tobacco industry; Maryland, similar to Massachusetts, receives both excise tax revenues and settlement agreement funds. The funds available for tobacco control on a per capita basis vary widely—from $0.59 in Texas to $10.22 in Massachusetts. However, Texas is the only state in which the funds are being spent in a predetermined number of cities, not statewide; hence, expenditures in those areas are actually much greater than $0.59 per capita.

To provide a context for the report, we present a series of tables that give background information on each of the case study states. Table 1-3 lists the population characteristics of the nation and the eight state case studies. Arizona, California, Texas, and Florida have large Hispanic populations, ranging from 16 percent to 32 percent of the statewide population. Arizona is the only state with a large group of American Indians, representing approximately

5 percent of the population. African Americans comprise a high percentage of the population in Mississippi (36 percent), Maryland (28 percent), Florida (15 percent), and Texas (12 percent). Asian Americans and other Pacific Islanders form 1 percent to 11 percent of the population in our case studies. Asian Americans are 11 percent of California's population and 4 percent to 6 percent of the population in Washington, Maryland, and Massachusetts.

Table 1-4 presents information about the 1997 to 1999 smoking population of each state. The percentage of the population aged 18 and older who are currently smoking ranges from 18.6 percent (California) to 23.5 percent (Mississippi). Inroads into smoking habits show a reduction in smoking from 16.2 percent (Arizona) to over 27 percent (California, Massachusetts, and Washington). Age-adjusted rates of the adult population who have never smoked can be seen in the table, with Arizona having the highest percentage (62 percent).

Table 1-2. Tobacco Control Funding

Funding Source	Massachusetts	Mississippi	Arizona	Maryland	California	Washington	Florida	Texas
State Funding/Appropriations								
Appropriation: Settlement — Tobacco Only	$12,800,000	$0	$0	$18,065,486	$0	$15,000,000	$44,215,497	$10,000,000
Appropriation: Excise Tax Revenue	$50,511,265	$0	$37,298,535	$1,893,000	$115,113,000	$0	$0	$0
Appropriation: Other	$0	$0	$0	$0	$0	$902,000	$0	$1,393,000
Funding: Partnership for a Healthier Mississippi	N/A	$22,000,000	N/A	N/A	N/A	N/A	N/A	N/A
Subtotal	$63,311,265	$22,000,000	$37,298,535	$19,958,486	$115,113,000	$15,902,000	$44,215,497	$11,393,000
Federal/National Sources								
Federal: CDC	$1,571,990	$470,796	$256,630	$1,370,605	$335,610	$1,424,995	$750,000	$969,828
National: American Legacy Foundation	$0	$0	$0	$99,207	$1,000,000	$801,290	$0	$0
Subtotal	$1,571,990	$470,796	$256,630	$1,469,812	$1,335,610	$2,226,285	$750,000	$969,828
Total	$64,883,255	$22,470,796	$37,555,165	$21,428,298	$116,448,610	$18,128,285	$44,965,497	$12,362,828
Per Capita Funding	$10.22	$7.90	$7.32	$4.05	$3.44	$3.08	$2.81	$0.59
CDC Recommended Per Capita Funding (lower and upper estimates)	$5.76 - $15.16	$6.88 - $17.14	$6.10 - $15.61	$5.95 - $15.43	$5.12 - $13.71	$5.94 - $15.93	$5.35 - $15.10	$5.31 - $14.65

Source: Centers for Disease Control and Prevention (CDC). 2001. *Investment in Tobacco Control: State Highlights—2001*. Atlanta, GA: U.S. Department of Health and Human Services.

Table 1-3. Percentage of Population by Race and Hispanic or Latino Origin—United States, Regions, Divisions, States, and Puerto Rico (2000)

United States, Region, Division, State, Puerto Rico	Total Population	Percent of Total Population									
		Race									
			One Race								
		Total	White	Black or African American	American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Some Other Race	Two or More Races	Hispanic or Latino (of any race)	White Alone, not Hispanic or Latino
United States	**281,421,906**	**100.0**	**75.1**	**12.3**	**0.9**	**3.6**	**0.1**	**5.5**	**2.4**	**12.5**	**69.1**
NORTHEAST	**53,594,378**	**100.0**	**77.5**	**11.4**	**0.3**	**4.0**	**—**	**4.5**	**2.3**	**9.8**	**73.4**
New England	**13,922,517**	**100.0**	**86.6**	**5.2**	**0.3**	**2.7**	**—**	**3.2**	**2.0**	**6.3**	**83.9**
Massachusetts	6,349,097	100.0	84.5	5.4	0.2	3.8	—	3.7	2.3	6.8	81.9
SOUTH	**100,236,820**	**100.0**	**72.6**	**18.9**	**0.7**	**1.9**	**0.1**	**3.9**	**1.8**	**11.6**	**65.8**
South Atlantic	**51,769,160**	**100.0**	**72.0**	**21.3**	**0.5**	**2.1**	**—**	**2.3**	**1.8**	**8.2**	**66.8**
Maryland	5,296,486	100.0	64.0	27.9	0.3	4.0	—	1.8	2.0	4.3	62.1
Florida	15,982,378	100.0	78.0	14.6	0.3	1.7	0.1	3.0	2.4	16.8	65.4
East South Central	**17,022,810**	**100.0**	**77.0**	**20.1**	**0.3**	**0.8**	**—**	**0.7**	**1.0**	**1.8**	**76.2**
Mississippi	2,844,658	100.0	61.4	36.3	0.4	0.7	—	0.5	0.7	1.4	60.7
West South Central	**31,444,850**	**100.0**	**71.3**	**14.4**	**1.4**	**2.2**	**0.1**	**8.2**	**2.4**	**22.4**	**58.5**
Texas	20,851,820	100.0	71.0	11.5	0.6	2.7	0.1	11.7	2.5	32.0	52.4
WEST	**63,197,932**	**100.0**	**68.5**	**4.9**	**1.9**	**7.9**	**0.5**	**12.1**	**4.3**	**24.3**	**58.4**
Mountain	**18,172,295**	**100.0**	**80.3**	**2.9**	**3.4**	**1.9**	**0.2**	**8.5**	**2.8**	**19.5**	**70.9**
Arizona	5,130,632	100.0	75.5	3.1	5.0	1.8	0.1	11.6	2.9	25.3	63.8
Pacific	**45,025,637**	**100.0**	**63.7**	**5.7**	**1.3**	**10.3**	**0.6**	**13.5**	**4.9**	**26.2**	**53.4**
Washington	5,894,121	100.0	81.8	3.2	1.6	5.5	0.4	3.9	3.6	7.5	78.9
California	33,871,648	100.0	59.5	6.7	1.0	10.9	0.3	16.8	4.7	32.4	46.7

Note: Percent rounds to 0.0. Data not adjusted based on the Accuracy and Coverage Evaluation. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see http://factfinder.census.gov/home/en/datanotes/expplu.htt

Source: U.S. Census Bureau, Census 2000 Redistricting Data (P.L. 94-171) Summary File for States and Census 2000 Redistricting Summary File for Puerto Rico, Tables PL1 and PL2. Internet Release date: April 2, 2001.

Table 1-4. Smoking Status by State/Race (1997-1999)

State	Race/Ethnicity					
	All Races	All Hispanic	Non-Hispanic White	Non-Hispanic Black	American Indian/ Alaska Native	Asian/ Pacific Islander
Arizona						
Never Smoked	62.41	67.64	60.28	61.14	78.19	64.36
Former Smoker	16.23	16.73	16.19	20.56	13.11	—
Current Smoker	21.26	15.46	23.46	18.3	—	—
California						
Never Smoked	54.02	59.66	49.29	52.49	46.11	68.31
Former Smoker	27.31	23.49	30.37	22.71	23.77	21.85
Current Smoker	18.57	16.55	20.3	24.8	30.11	9.5
Florida						
Never Smoked	51.97	64.01	45.93	69.88	42.36	65.45
Former Smoker	24.71	19.21	27.4	14.51	22.64	13.2
Current Smoker	23.14	16.65	26.52	15.4	35	21.35
Maryland						
Never Smoked	54.76	63.25	52.05	58.53	52.52	79.9
Former Smoker	24.13	16.12	26.53	19.61	27.17	10.26
Current Smoker	20.84	20.38	21.29	21.42	—	9.85
Massachusetts						
Never Smoked	51.35	66.74	49.29	63.85	74.39	74.38
Former Smoker	27.8	15.33	29.47	15.38	—	—
Current Smoker	20.28	1.9	20.7	20.19	—	15.38
Mississippi						
Never Smoked	54.92	51.36	50.35	64.05	42.75	78
Former Smoker	21.19	24.13	23.8	15.92	—	—
Current Smoker	23.51	24.51	25.6	19.51	—	—
Texas						
Never Smoked	54.91	61.48	50.87	63.49	40.1	62.9
Former Smoker	22.74	18.96	25.5	12.17	22.85	21.32
Current Smoker	21.92	19.21	23.2	23.92	37.04	15.78
Washington						
Never Smoked	50.09	56.32	49.17	56.14	34.92	71.19
Former Smoker	27.1	26.52	27.64	18.84	32.31	13.51
Current Smoker	22.38	17.15	22.76	25.01	32.77	15.12

Note: Both Sexes. All ages (2000 age-adjusted).
Source: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics. October 2001. *State Health Statistics by Sex and Race/Ethnicity*. <http://www.cdc.gov/nchs/datawh/statab/usetables.html>.

2 Evaluation Synthesis of Published Scientific Literature

This section provides a synthesis of the findings of evaluation studies of population-based tobacco control interventions that were published between June 1, 2000, and June 30, 2001. Appendix B provides an evidence table with brief descriptions of the study design, outcomes, and conclusions for each of the studies reviewed.

2.1 KEY FINDINGS ON EFFECTIVENESS OF INTERVENTIONS

Published evaluations of interventions pertaining to Communities of Color are few. Those we found were focused on adolescents.

Our literature search resulted in only 16 studies conducted between June 1, 2000, and June 30, 2001, that were evaluations of community-based interventions in prevention, cessation, and environmental tobacco smoke (ETS). Only 6 of these studies evaluated interventions that involved racial and ethnic minorities or mentioned the participation of these groups (Albrecht, Higgins, and Lebow, 2000; Bauman et al., 2001; Bauer et al., 2000; Hovel et al., 2000; Landrine, Klonoff, and Reina-Patton, 2000; Litrownik et al., 2000). All but one of the interventions evaluated in these studies targeted adolescents.

The published literature provided additional evidence of effectiveness for three interventions previously recommended by the Community Guide Task Force as best practices.

The published literature contained roughly equal numbers of evaluations of interventions that focus on prevention and cessation but only one directed toward ETS. Further evidence of effectiveness was found for two prevention interventions that the Community Guide Task Force identified as best practices: (1) increasing the unit price for tobacco products (Biener, Harris, and Hamilton, 2000) and (2) mass media campaigns combined with other interventions to reduce tobacco use initiation (Bauer et al., 2000; Sly, Heald, and Ray, 2001: Sly et al., 2001). The literature also contained further evidence supporting media campaigns combined with other interventions as a best practice for cessation (Biener, McCallum-Keeler, and Nyman, 2000; Fichtenberg and Glantz, 2000; Secker-Walker et al., 2000).

A published evaluation supports the importance of mass media campaigns in combination with other interventions in preventing the initiation of tobacco use in Communities of Color.

The Bauer et al. (2000) study, which evaluated Florida's tobacco control program, provides evidence that state programs with multiple components are effective in preventing the initiation of tobacco use among Hispanic and African American adolescents.

Non-Hispanic White, Non-Hispanic Black, and Hispanic students in both middle and high schools in Florida showed declines in current cigarette use between 1998 and 2000. The decreases were statistically significant for all subgroups except non-Hispanic Black high school students. Non-Hispanic Blacks had the lowest smoking rate overall—9.5 percent in 1998, 8.5 percent in 1999, and 6.4 percent in 2000—in contrast to Whites at 22.1 percent, 16.1 percent, and 13.4 percent, respectively, and Hispanics at 16.9, 16.1, and 9.8 percent. Furthermore, statistically significant declines in frequent cigarette use were observed among all groups except middle and high school non-Hispanic Blacks and high school Hispanics. However, statistically significant increases in never smoking and decreases in experimenting were observed for all three racial/ethnic groups of middle and high school students.

The published literature supports the effectiveness of community education in Communities of Color for smoking cessation and reduction of ETS and is suggestive of an effect in decreasing smoking initiation.

Four studies conducted in Communities of Color evaluated community education programs that addressed at least one of the three major goals of tobacco control programs. These studies provided evidence that community education programs would lead to increased smoking cessation and reduced ETS. The results of one study suggested that education programs may also be effective for prevention of smoking initiation.

Albrecht, Higgins, and Lebow (2000) showed that a program with peer support could increase knowledge of smoking effects and lead to an increase in smoking cessation among pregnant teens of diverse racial backgrounds. Hovell et al. (2000) were able to reduce the exposure to ETS among children under age 4 in San Diego County, a racially diverse low-income area. The intervention they tested was a series of seven counseling sessions with mothers that included shaping procedures, setting goals, and signing nonsmoking contracts.

Bauman et al. (2001) and Litrownik et al. (2000) evaluated family-directed educational programs for adolescents. In the former, adolescents aged 12 to 14 were paired with a parent and received an intervention that included mailed booklets and telephone contacts by health educators. They found a statistically significant reduction in smoking onset in non-Hispanic White families but not in all other races/ethnicities analyzed together. Litrownik et al.'s (2000) evaluation targeted high-risk Hispanic teens and their families. Their intervention featured eight weekly, 2-hour sessions, with parents attending three of the educational sessions. The hypothesis was that improving parent-child communication on tobacco use would ultimately affect smoking behavior. The investigators found the intervention to be effective in increasing communication in families with fewer children, suggesting a possible impact on preventing smoking initiation.

One study provides evidence that legislation prohibiting sales to minors is effective in all ethnic communities. However, other studies show adolescents turned to other sources for acquiring their cigarettes.

We found additional contributory evidence of the success of legislation to restrict youth access to tobacco products (Landrine, Klonoff, and Reina-Patton, 2000). Landrine et al.'s evaluation consisted of a primary data collection effort in a single county and, uniquely, tried to assess neighborhood context and its effect on teen access to cigarettes. Their analysis of the success of the California STAKE Act comprised a relatively small sample of stores, with 24 each located in African American, White, and Hispanic communities. Sales were examined at five points in time over the period from August 1994 to January 1999 and were measured through attempts by teams of minors to purchase cigarettes at each store, equaling 432 purchase attempts. The researchers evaluated whether sales to minors decreased over time and whether this decrease occurred in all three neighborhoods. They found that the decline in successful purchase attempts occurred more quickly in White neighborhoods than in Communities of Color. However, a stepwise, hierarchical logistic regression predicting whether or not the minor was able to complete a sale did not support an independent effect of neighborhood. However, the stores were three to four times more likely to sell cigarettes to minors before the STAKE ACT than after its implementation. The researchers concluded that the Act and its enforcement have been effective in reducing minors' access to tobacco in all ethnic communities.

In contrast to this study, the California state reports discussed in Chapter 3 showed little or no effectiveness when access was measured by student reports of difficulty in obtaining cigarettes or by reported change in the difficulty of purchasing cigarettes. Adolescents turned to other sources of acquiring the cigarettes than direct purchase.

In summary, our focused review of the published literature found that the majority of the studies concentrated in only three goals of a comprehensive tobacco control program (National Association of County & City Health Officials, 2000): prevention, cessation, and elimination of ETS. Minimal contributions were made toward the

goal of identifying and eliminating tobacco-related disparities among populations.

2.2 KEY FINDINGS ON EVALUATION METHODS USED

The published studies often did not provide information on the representativeness of the sampling frame, including the racial/ethnic make-up.

Some articles did not give complete information on the representativeness of the sample. For example, the Albrecht, Higgins, and Lebow (2000) study, although strong in other ways, did not fully describe the hospitals or clinics that were the source of the study participants. Sly, Heald, and Ray (2001) left concerns about how representative the national sample was of the nation as a whole and how representative the Florida sample (a purchased student list) was of the state. Studies in Florida's schools (Bauer et al., 2000) did not give details about the characteristics of the chosen schools and whether nonresponse was biased in any given direction. Some studies did not control, or possibly could not control, for race/ethnicity (Biener, McCallum-Keeler, and Nyman, 2000; Clark et al., 2000; Fichtenberg and Glantz, 2000).

Regardless of how descriptive the articles were of the general population, however, only six even mentioned race or ethnicity and thus leave questions about the quality of the science for Communities of Color.

Opportunities for addressing the differential impact of an intervention by race/ethnicity or in Communities of Color may have been missed.

Some evaluations reported in Appendix B might have been able to evaluate the intervention's impact in Communities of Color. The Clark et al. (2000) evaluation of compliance used Food and Drug Administration (FDA) data in which minors were recruited to attempt to purchase cigarettes. The states selected the minors who participated in the compliance checks, and Clark et al. mentioned that states were instructed to select minors who reflected the ethnic and racial characteristics of the communities in which they

conducted the checks. Although age and gender of the minor were controlled, race/ethnicity was not included in the analysis. Sly, Heald, and Ray (2001), Sly et al. (2001), and Fichtenberg and Glantz (2000) may also have been able to address the intervention's effect in Communities of Color, but this information was not their focus and race/ethnicity do not enter into the description of the population or the analysis.

3 State Programs

This section of our report presents the results from eight state case studies. We provide a general description of each state tobacco control program and its goals. We also discuss evaluations published in the period from June 1, 2000, to June 30, 2001, planned further evaluations, and the state's capacity to conduct evaluations on initiatives geared toward Communities of Color. We begin with a summary of our findings from the case studies.

3.1 SUMMARY OF THE EIGHT CASE STUDIES

Two goals of tobacco control programs—prevention and cessation—are adopted by the study states more often than the third goal of reducing environmental tobacco smoke (ETS).

The eight state case studies share many of the same goals for their tobacco control programs (see Table 3-1). All of the states are working to prevent the initiation of tobacco use. Cessation, too, is often a goal of the states' tobacco control programs. If not emphasized in the current year, as is the case in Florida, cessation is one of the goals of the coming year. Reducing ETS is the third goal of tobacco control and is shared by six of the states studied. In addition, several state programs have other objectives in common. For example, reducing racial disparities is a goal of Maryland, Texas, and Washington; empowerment is a goal of Florida, Maryland, and Mississippi; and reducing youth access is a goal of California, Florida, and Massachusetts.

Table 3-1. Comprehensive Tobacco Control Program Goals for FY 2001, by State

	Promote Cessation	Prevent Initiation	Eliminate ETS	Reduce Disparities	Empowerment	Reduce Youth Access
Arizona	✓	✓				
California	✓	✓	✓			✓
Florida		✓	✓		✓	✓
Maryland	✓	✓		✓	✓	
Massachusetts	✓	✓	✓			✓
Mississippi		✓	✓		✓	
Texas	✓	✓	✓	✓		
Washington	✓	✓	✓	✓		

Note: ETS = environmental tobacco smoke

Some states have developed unique approaches. For example, California attempts to "denormalize" tobacco use and plans a national conference on legal issues impacting tobacco control to examine the successes, challenges, and lessons learned by its Technical Assistance Legal Center. Texas has a strong pilot program that examines various combinations of program elements to determine the optimal approach with the greatest cost efficiency.

All eight study states are developing programs that target Communities of Color. The size and diversity of the Communities of Color within each state influence the efforts geared toward these groups.

California and Florida, two of the most racially and ethnically diverse states, are recognized nationally as having model programs in tobacco control for Communities of Color. California has four statewide ethnic networks that serve African Americans, Native Americans, Asians, and Hispanics. Through these networks, local community efforts have focused on tobacco advertisements and have supported policy restrictions. The local community efforts have also influenced negative beliefs about tobacco. California's evaluations show that White and African American adults are exposed to multiple components of tobacco control programs more so than are adult Hispanics and Asian Americans. Among youths, all Communities of Color have less exposure than Whites. These facts, together with recent evidence that smoking rates are increasing among minority youth (U.S. Department of Health and Human Services [DHHS], 1998), have prompted California to continue support for interventions that target minority youth. This policy decision has been made even though smoking prevalence is lower among minority adolescents than among White adolescents. Although California offers many tobacco control interventions, it is difficult to identify ones that are conducted by the statewide ethnic networks or to identify evaluations of these programs. Interventions are described within the overall tobacco control framework, and initiatives specific to the ethnic networks are effectively merged within the program, hence making it difficult to discern lessons learned from them.

Florida's program differs from California's in its concentration on adolescents. In 1999, the Minority Tobacco Control Task Force (MTCTF) was appointed to facilitate participation of minority organizations. This effort has resulted in some success, as non-Hispanic African American students are actually overrepresented in the SWAT program and non-Hispanic White youth are underrepresented. However, Florida's program is searching for definitional clarity in several ways. For example, an evaluation of a recent workshop focusing on the empowerment of youth showed the need for clarification of the concept of "empowerment" before an effective workshop could be held on the topic. Similarly, Florida's program for Communities of Color has emphasized the need for a definition of "minority group" and then a policy of inclusion among all potential members. Finally, a rather dramatic contrast in future plans can be seen between Florida and California. In contrast to California's continued targeting of minority adolescents, Florida identifies the high-risk population as non-Hispanic White youth because of their higher use of tobacco products and urges the design of interventions that will ultimately lower the rate of use for that population.

Overall, our study shows that much work needs to be done. Five of the eight states are in the beginning stages of designing their tobacco control programs for Communities of Color. Arizona has a diverse population and has examined differences in attitudes toward tobacco products and smoking behaviors among all of its racial and ethnic adolescent populations, but these analyses are descriptive and have not looked at the outcome of interventions in Communities of Color. The state has been able to describe the clientele of its helpline, one-third of whom are Hispanics.

Washington has developed a broader program than other states to reach its diverse population and offers a separate Spanish language quitline and a TTY line for the hearing impaired. Washington is able to make referrals to community-based cessation programs and to offer counseling in 44 different languages. Its evaluation plan is not yet available, but with 8 percent of its settlement funds committed to evaluation, the state is well positioned to conduct them.

Maryland, Texas, and Mississippi have smaller programs or ones that are in the planning stages. Evaluations are even less developed

at this time. Maryland's goal is to form community health coalitions to identify, develop, and implement prevention and cessation strategies. It intends to involve members of the African American community and has made it a priority to address tobacco control in Communities of Color; however, at this stage, planning is itself in process. Texas has included members of Communities of Color in its pilot study, but the program will not be developed until the pilot study is completed, evaluated, and presented to the Texas legislature in 2002. Mississippi is working with faith-based organizations to reach its large African American population and will rely on neighboring universities to assist in the design and evaluation of its interventions. At this time, however, it is fair to say that these three states are no further along than simply having conducted surveys of smoking behavior and are in the early stages of planning the interventions and evaluations to be conducted.

Massachusetts is distinct in addressing the needs of Communities of Color and includes several small communities: Hispanic, Asian, and African American. Although the state has evaluated the impact of the excise tax on smoking behavior and the impact of its media campaign, the evaluations do not address the influence of these interventions on Communities of Color. Massachusetts' tobacco control web site suggests that a high priority is given to planned refinements to the state's advertisement and media campaigns to reach diverse populations. We could find no further information or specific plans.

In general, no obstacles in the states' capacity to conduct evaluations were presented through interviews or reports. Approximately 40 percent of the states are well funded for conducting evaluations as determined by the Centers for Disease Control and Prevention (CDC's) best practices recommendation, but some states are facing financial constraints. Maryland's evaluation budget is approximately a third of the recommended amount. Florida's evaluation program is below the minimum CDC recommendation and is expecting a further cut this fiscal year. California is spending approximately 60 percent of the minimum amount recommended by CDC, but its tobacco program is producing results.

Outcome evaluations of interventions pertinent to Communities of Color are difficult to find.

Table 3-2 provides a summary of the evaluations currently available or planned in the eight study states and shows how they relate to Communities of Color. In most states, evaluations focus on number served or number of persons exposed to the intervention; while important, this information does not address whether the program is effective. Texas is taking a more cost-effective approach by evaluating what programmatic combinations contribute to changing smoking behavior. Most states have conducted surveys on attitudes, beliefs, and practices and produced a tabulation of current smokers, experimenters, and those who have not initiated smoking. This form of data is the most common. Many local projects exist, but state reports provide little documentation of their effectiveness.

Past evaluations of programs serving Communities of Color have used both qualitative and quantitative methods. However, the results reported are often limited to documenting the number of persons served (e.g., Florida's evaluation of SWAT) or the number of interventions funded (e.g., California's evaluations of statewide ethnic networks). Even so, in the states that we studied, Florida and California are further along in the evaluation of such programs. What is absent in our report are detailed evaluations of these interventions, which were either nonexistent or, despite our best efforts, were not found. This finding emphasizes the need for technical assistance to be given to the local community programs in the design of a model evaluation for programs at this level. Local programs are expected to have a more thorough knowledge of their populations and to be better able to design programs that serve their communities. More needs to be done to evaluate these programs beyond process evaluation and beyond simply documenting the numbers who attended or are aware of the media campaign. Questions of outcome need to be addressed, as well as changes in tobacco use in the Community of Color. Such evaluations will allow the programs to be replicated by others, leading to these interventions becoming best practices in Communities of Color.

State tobacco control programs must seek a balance between relying on local communities to develop and deliver programs and working with the communities through evaluation. Community personnel are trained to be effective in community organization and

education, but not necessarily to serve as evaluators. More avenues for technical assistance from the state, nearby universities, or CDC need to be explored. Without further development of evaluation partnerships, the lessons learned in one community will remain in that locality and with its current participants. An effort to evaluate these interventions beyond numbers served is needed, and these evaluations should begin to find their way into the national literature through journals or reports. In this way, Communities of Color will also benefit by scientific developments.

Table 3-2. State Evaluations of Population-Based Tobacco Control Interventions

State	Evaluations Currently Available or Planned	Treatment of Communities of Color in Evaluations	Interventions Evaluated	Outcomes Evaluated	Key Findings
California	*Interim Report. Independent Evaluation of the California Tobacco Control and Education Program* conducted by The Gallup Organization, Stanford University, and the University of Southern California. Includes published studies by Litrownik et al. (2000) and Landrine et al. (2000).	Local programs in Communities of Color were not directly addressed in the report; few of the interventions' impacts were broken out by race/ethnicity.	➤ Community programs ➤ Mass media campaigns ➤ School-based Tobacco Use Prevention Education (TUPE) program	➤ Attitudes about tobacco and tobacco control policies ➤ Exposure to ETS ➤ Youth access to tobacco ➤ Awareness of media campaign ads	The Gallup evaluation found: (1) adults living in counties with local tobacco control programs (TCPs) were more concerned about tobacco ads, supported policy restrictions, and held more negative beliefs about tobacco; (2) California counties that placed more effort into programs addressing the ETS issue showed greater reductions in ETS in 1998 than counties that placed less effort; (3) no significant relationships between the TCP and youth access to tobacco were found; (4) statewide mass media campaign has been successful—Southeast Asian American adults were among the least likely to be reached.
Florida	➤ Florida Anti-Tobacco Media Evaluations ➤ Florida Youth Tobacco Survey ➤ Community Partnerships Work Plan ➤ Includes published studies by Bauer et al. (2000) and Bauer and Johnson (2001)	The evaluation plan does not distinguish between Communities of Color and the populations in general, but initiation and smoking rates are broken out by race and ethnicity.	➤ Media campaign ➤ Community-based programs ➤ School-based (TUPE) programs	➤ Exposure to anti-tobacco media campaign ➤ Tobacco-related attitudes among youth ➤ Tobacco use ➤ Tobacco use prevention education ➤ Participation in Community Partnerships ➤ Exposure to ETS ➤ Access	

Table 3-2. (continued)

State	Evaluations Currently Available or Planned	Treatment of Communities of Color in Evaluations	Interventions Evaluated	Outcomes Evaluated	Key Findings
Arizona	Reports on two surveys have been released: the 2000 Arizona Youth Tobacco Survey and the 1999-2000 Arizona CHAMPS Peer Project for Tobacco Use Prevention Surveys. State is in the initial stages of a comprehensive evaluation of youth initiatives.	Some results of evaluations are broken out by race/ethnicity.	➤ CHAMPS, a tobacco education program for youth ➤ Media campaign ➤ Arizona Smokers' Helpline ➤ Media messages in Spanish	➤ Percent ever smoked, current smoker, etc. ➤ Susceptibility (i.e., respondents' reports of uncertainty about whether or not they thought they might smoke a cigarette soon or might smoke a cigarette if offered one by a best friend)	➤ CHAMPS: Increases in youth who ever smoked and who are current smokers not as great as in comparison group. ➤ Media campaign: Susceptibility was found to be associated with race; Native Americans showed the highest proportion of susceptibility (52%), followed by African Americans (44%), Hispanics (43%), and all others (34-36%).
Massachusetts	Annual evaluations conducted by Abt Associates. Includes published studies by Biener, Harris, and Hamilton (2000) and Biener, McCallum-Keeler, and Nyman (2000).	Interventions do not target Communities of Color, and evaluation studies do not typically break out results by race/ethnicity.	➤ $0.25 surcharge per pack of cigarettes ➤ Television anti-tobacco campaign	➤ Smoking rates ➤ Receptivity to anti-smoking campaign	Trend data indicate that the Massachusetts Tobacco Control Program is a successful program, with smoking rates continuing to go down.
Maryland	Initial findings from two surveys—the Maryland Youth Tobacco Survey and the Maryland Adult Tobacco Survey—are available.	Tobacco use statistics are broken out by racial/ethnic group.	NA	Tobacco use	
Texas	Some individual and overall reports on the quasi-experimental community study of the Texas Tobacco Prevention Initiative pilot project are available; others are in process or planned.	For most reports, findings are broken out by racial/ethnic group.	Three levels of media activity and five combinations of programs (cessation, law enforcement, school-community, a combination of three, and no program)	Changes in knowledge, attitudes, values, and behavior	Preliminary findings show that the combination of activities that was most effective in reducing tobacco use involved a high-level media campaign coupled with multiple community programs.

Table 3-2. (continued)

State	Evaluations Currently Available or Planned	Treatment of Communities of Color in Evaluations	Interventions Evaluated	Outcomes Evaluated	Key Findings
Mississippi	Summary report and reports on faith-based and school-based prevention activities are available.	A special strategy was developed for the state's large African American population.	➤ Community Youth Partnerships ➤ Faith-based programs ➤ Racially targeted programs (52% to Blacks and 48% to Whites)	Assessment of knowledge and attitudes, awareness, and programmatic effectiveness	
Washington	None	Targeted groups for evaluation include Asians and Pacific Islanders, Native Americans, African Americans, and Hispanics.	➤ Washington Quit Line (helpline) ➤ School-based programs ➤ Public awareness and education campaign ➤ Retailer compliance checks and retailer education	Changes in use, attitudes, and beliefs	None yet

3.2 CALIFORNIA

The four priority areas of the California Tobacco Control Program (TCP) are to

- ➤ reveal and counter tobacco industry influences,
- ➤ reduce ETS,
- ➤ reduce youth access, and
- ➤ provide cessation services.

To achieve these goals, the California TCP funds multiple interventions that address individual, social, and environmental factors related to tobacco use. Community programs, a statewide mass media campaign, and the school-based Tobacco Use Prevention Education (TUPE) program work to "denormalize" the use of tobacco, that is, to make tobacco and its use less acceptable in social life. This goal is accomplished by encouraging interventions that affect change in the broader social environment and, thereby, change individual action.

The California Department of Health Services launched the California Tobacco Control Program in spring 1990. Funding for the program in FY 2001 was $116.4 million, or $3.44 per capita. Most of these funds were appropriated from state excise tax revenues ($155 million). Although California's funding is at 71 percent of the CDC's best practices recommendation of a minimum of $5.12 per capita, the program has succeeded in reducing smoking. For example, per capita cigarette sales declined by 48 percent since the program's inception, compared with a 23 percent decline nationwide over the same time period. In addition, the prevalence of smoking among underage youth is the lowest in the country, after Utah (Substance Abuse and Mental Health Services Administration [SAMHSA], 2001). Our evaluation synthesis focuses on the community programs and the statewide mass media campaign.

3.2.1 Evaluation Studies Currently Available

In January 2001, The Gallup Organization, Stanford University, and the University of Southern California completed a report entitled *Interim Report. Independent Evaluation of the California Tobacco*

Control and Education Program: Wave 2 Data, 1998; Wave 1 & Wave 2 Data Comparisons, 1996-1998 for the Tobacco Control Section of the California Department of Health Services (Independent Evaluation Consortium, 2001). This interim report is the most current documentation of California's TCP evaluation and served as the primary data source for our evaluation synthesis, which was limited to documents and reports of the previous 12 months.

3.2.2 Primary Questions and Key Findings

The primary questions addressed in the interim evaluation study were derived from the evaluation reports and are stated below. However, few of the interventions' evaluations were conducted by comparing effects across racial or ethnic groups. Racial and ethnic groups were not ignored, but, rather than take a common message and examine its impact on Communities of Color, local groups in local communities, which may be ethnically and/or racially diverse, applied for funding to conduct interventions in their communities. The questions asked in the interim evaluation conducted by Gallup were consequently broad in character, with only occasional mention of particular populations. The evaluation questions pertaining to population-based interventions are as follows:

1. How has the tobacco-marketing environment in California changed over the 2 years of TCP efforts?
2. What has been the outcome of local tobacco control programs in countering pro-tobacco influences, in reducing exposure to ETS, and in reducing youth access to tobacco products?
3. What are the relationships between youth and adult exposure, as well as that of opinion leaders, to the statewide media campaign and tobacco-related outcomes?

Tobacco Marketing Environment in California

The interim report describes the California tobacco marketing environment. It found that, although tobacco billboard advertising was eliminated by the November 1998 Master Settlement Agreement (MSA) (which resolved lawsuits filed by the attorneys general in 46 states and five U.S. territories against the tobacco

industry), advertising continues in traditional ways and has expanded in others. In 1998, 267 tobacco-sponsored public events took place in California. Most were part of a series that traveled nationwide with a national sponsor. This type of advertising is likely to continue so as to avoid individual state regulations.

National magazines with high California readership had relatively high levels of tobacco advertising, and the Gallup evaluation reported that these ads are found in magazines aimed at African Americans, Hispanics, or local geographic regions in California. African American newspapers have a higher percentage of ads than newspapers that target other ethnic groups or a general audience. Tobacco advertising has increased in most California newspapers, but particularly in the weekly entertainment media read by African Americans. The majority of tobacco ads in African American and Hispanic newspapers are from Philip Morris, Brown and Williamson, and RJ Reynolds. Common themes include statements that the corporation encourages carding of minors who try to purchase cigarettes and announcements that the corporation supports the arts, the Black Press, or scholarship funds.

Outcome of Local Tobacco Control

In 1998, the TCP funded 152 local community agencies throughout the state, including the following:

- 61 local health departments of local lead agencies (LLAs)
- 11 regional community linkage initiative projects
- 4 statewide ethnic networks (African American, Native American, Asian, and Hispanic)
- 76 local (city- or county-specific), multicounty, or statewide competitive grantees funded to develop and implement a variety of focused projects

The Gallup evaluation found significant relationships between the California TCP and efforts by local programs to counter pro-tobacco influences. As a result of the local community efforts, adults living in these counties were more concerned about tobacco ads, supported policy restrictions, and held more negative beliefs about tobacco. Over the 2-year period of the evaluation, local policy

efforts to counter pro-tobacco influences increased; however, tobacco marketing and advertising remained prevalent.

Communities of Color were not mentioned in the key findings of efforts to counter pro-tobacco influences. Some analyses of the relationship between ethnicity and density of tobacco billboards were found, but the relationship was not statistically significant and the only finding that was unique by ethnicity was the type of brand advertised. Advertisements for Camels dominated White neighborhoods, the Newport brand was more often advertised in African American neighborhoods, and GPC was featured in Hispanic and Asian American neighborhoods.

Reducing Environmental Tobacco Smoke (ETS)

California counties that placed more effort into programs addressing the ETS issue showed more change in 1998 than counties that placed less effort. The outcomes assessed were exposure to ETS at home and at work. In general, the vast majority of California adults were not exposed to ETS, either at home or at work. Rates of nonsmoking adults not exposed to ETS at home or work ranged from 76 percent to 83 percent, respectively. For smokers the rates were 52 percent to 74 percent, respectively.

Evidence reveals that people of color are disproportionately at risk for environmental smoke in specific situations. Nonsmoking African American adults are more exposed than other persons in their homes, and Hispanics, regardless of whether they smoke or not, are more exposed than others in their work environment. African American youth are at higher risk for exposure to ETS in cars than are others. From 1996 to 1998, there was a decrease in the general population of children who were exposed to ETS on a regular basis.

Reducing Youth Access to Tobacco

The Gallup evaluation found no significant relationships between the TCP and youth access to tobacco. This conclusion was reached whether access was measured by student reports of difficulty in obtaining cigarettes or by reported change in the difficulty of purchasing cigarettes. The evaluators did find that counties that put an emphasis on youth access conducted more compliance checks of tobacco merchants. This finding is contradictory to the

conclusion reached by Landrine, Klonoff, and Reina-Patton (2000) regarding California's STAKE Act. The evaluators point out that, when sales to minors decreased, as they did between 1997 (21.3 percent) and 1998 (13.1 percent), teen smokers turned to friends and other social sources. Enforcement agencies are more likely to target youths than merchants even though, according to the evaluator, targeting merchants is the most effective activity in reducing the rate of illegal sales to minors. The evaluation of reductions in youth access to tobacco included no mention of race or ethnic differences.

The Statewide Media Campaign

The California statewide mass media campaign has been successful, with over 90 percent of the population reporting an awareness of the media campaign ads in 1998. Ninety-three percent of 8th graders, 95 percent of 10th graders, 91 percent of adults, and 95 percent of opinion leaders saw one or more of the ads on television, radio, or billboards. Exposure increased over the 2-year period, and in 1997 to 1998 environmental smoke became more of a target than youth access. Although certain ads were more likely to be recalled by some segments of the population than others, among 8th graders the general audience media campaign had its lowest reach among males, Whites, and youth who identified their race/ethnicity as "other." For 10th graders, the lowest reach was among Southeast Asian Americans. Southeast Asian American adults were also among the individuals less likely to be reached by the media campaign. The evaluators of this program argue that the results support the need to focus on Southeast Asians in the continuation of the campaign, which may also indicate a need to reach other less-served population groups (Independent Evaluation Consortium, 2001, p. 96). The media campaign was shown to be effective in changing personal actions, such as asking others not to smoke, and the belief that ETS causes cancer. Attitudes toward the tobacco industry were also found to be more negative as a result of the campaign. Because the campaign attracted wide attention, it is not surprising to learn that it is associated with more helpline calls and more quit attempts among smokers.

Exposure to Multiple Components

California has no plans to pull away from local lead agencies and projects that target diverse ethnic communities. The evaluation shows that, among adults, exposure to tobacco control programs varies significantly by ethnicity, age, and education. White and African American adults were more likely to be exposed to tobacco control programs through multiple components than were adult Hispanics and Asian Americans. Among youth, Whites were more likely to be exposed to tobacco control messages through multiple components than were ethnic minorities, including African Americans, Hispanics, and Asian Americans. The evaluators report that, even though ethnic minority adolescents have a lower smoking prevalence than do White adolescents, recent evidence suggests that smoking rates are increasing among minority youth (DHHS, 1998). They argue, therefore, that TCP efforts should continue to target minority youth. At the same time, because young White males are most likely to smoke, the evaluators also encourage more tobacco control programs for this population.

Use of Helpline Calls

The Tobacco Control Section of California's Department of Health Services funds the California Smokers' Helpline, which offers counseling in English, Spanish, Vietnamese, Korean, Mandarin, and Cantonese. The helpline has tailored services for those who chew tobacco, for the hearing impaired, for youth, and for pregnant women. Evaluation efforts show that the ethnic groups use these services at a rate proportionate to their size in the population. Whether these services are effective in changing behavior was not analyzed.

3.2.3 Planned Evaluations Pertinent to Communities of Color

California has identified many programmatic activities that expand its current approach to denormalize the use of tobacco among all racial and ethnic groups, and these activities are likely to be the subject of future evaluations. A partial list includes the following:

- ➤ conducting a national conference on legal issues that affect tobacco control

- developing and disseminating a case study to examine the successes, challenges, and lessons learned by California's Technical Assistance Legal Center (TALC)
- conducting one or two public opinion polls or surveys to help determine future directions, refining the approaches and methods of the California TCP
- completing the study entitled *The Cost of Smoking in California* to determine the economic impact of tobacco use in California following the first 10 years of the California TCP
- conducting one or two training sessions for law enforcement agencies in California to increase compliance with Penal Code 308a—the state law prohibiting the sale of tobacco to minors—and with California's Smoke-Free Workplace Law for restaurants and bars

Another activity related to the state's goal and recommended by the evaluators is to study efforts to educate nonsmokers who are at higher risk for daily exposure to ETS at home, a situation in which African Americans are among those at high risk. The evaluators are also encouraging investigations into why Hispanics and those with lower education receive daily doses of ETS at work.

Another area for future study is the adequacy of the media campaign for English-speaking Southeast Asian 10th graders and adults, as well as for White 8th graders, older adults, and the less educated. The evaluators also conclude that greater efforts are needed to reach ethnic minorities. They express concern that Hispanic and Asian American youth and adults, as well as African American youth, may not be receiving the full benefit of tobacco control programs in the state. These groups are less likely to be exposed to tobacco control messages through multiple components, and greater effort might be needed to disseminate such messages to them. Although the program evaluators recommended the above interventions, there was no evidence of an evaluation plan for them.

Another promising avenue for future evaluation is to extend the work of Litrownik et al. (2000) in San Diego. They found that a culturally sensitive, family-based intervention for migrant Hispanic youth increased perceived parent-child communication in small

families. The researchers argue that this finding should lead to later observed decreases in tobacco and alcohol use.

3.2.4 Evaluation Capacity

California has an active tobacco control program, with a stronger interest in its ethnic communities than is seen in most other states. California's efforts are to be applauded and encouraged to continue with its development of interventions; however, the state's budget for evaluation is below the CDC's best practices recommendation of 10 percent. This lack of funding may hinder its capacity to go beyond process evaluations to evaluating the outcome of the various interventions.

Currently, many evaluations focus on process evaluation—who is reached or how many interventions are funded. Questions about outcomes need to be asked. Working with local communities and LLAs can be helpful in reaching people, but local communities may look to the state for evaluation support in such instances. Currently, evaluations seem to be performed at an entirely different level (i.e., Gallup or Stanford University) and with a delayed schedule. The evaluation report of activities that ended in early 2000 should now be available. Although the state has developed an online form for a work plan and argues that evaluation must be integrated into the program planning process of the 2001-2004 California Tobacco Control Plan, it would seem the agencies need evaluation assistance that begins with initially planning the intervention. The state does offer this help, but the evaluation plan still focuses on process. Emphasis on smaller, local interventions makes it problematic to compare the same program with different populations and a control group, which weakens the generalizability of the potential findings.

3.3 FLORIDA

The primary goals of the Florida Tobacco Pilot Program (FTPP) are to

- ➤ change attitudes about tobacco among youth and community members,
- ➤ empower youth to lead community action against tobacco,
- ➤ reduce access,

- ➤ reduce youth exposure to secondhand smoke, and
- ➤ reduce prevalence of tobacco use among high-risk populations (a new goal).

The FTPP was established with funds from the $11.3 billion legal settlement between the tobacco industry and the state of Florida. During the first 16 months, February 1998 to June 1999, the program spent approximately $82.5 million. For FY 2000, its budget was approximately $37 million, but due to recent national events (i.e., the terrorist attacks of September 11, 2001), the state legislature is considering an additional budget cut of $18 million.

Through initiatives such as Students Working Against Tobacco (SWAT) and youth involvement with the Truth campaign, the FTPP has reached out to youth on a much larger scale than in other tobacco control programs. The FTPP program reaches all corners of the state with its commitment to local tobacco control in the form of Community Partnerships and with its Diversity Initiatives program, which helps ensure that culturally appropriate messages reach diverse populations.

To date, the program has achieved considerable success. Two years after the program began in 1998, the prevalence of smoking and initiation rates declined rapidly among middle school students and high school students (Bauer et al., 2000).

Current cigarette use—students who smoked cigarettes on 1 or more of the past 30 days—declined by 40 percent among middle school students (from 18.5 percent to 11.1 percent) and by 18 percent among high school students (from 27.4 percent to 22.6 percent). Statistically significant decreases were noted among non-Hispanic White (22.1 percent to 13.4 percent) and Hispanic (16.9 percent to 9.8 percent) high school students, but not among non-Hispanic Blacks (9.5 percent to 6.4 percent). In all 3 survey years, however, non-Hispanic Blacks continued to have the lowest prevalence of current cigarette use in middle school and high school. Experimenters—students who had tried cigarettes, had never smoked daily, and had not smoked in the 30 days preceding the survey—also showed statistically significant decreases among all three subgroups in both middle school and high school.

The program also achieved its goal of decreasing initiation rates. The percentage of students who were never users of cigarettes increased from 56.4 percent to 69.3 percent among middle school students and from 31.9 percent to 43.1 percent among high school students. Statistically significant increases were seen among all subgroups.

3.3.1 Evaluation Studies Currently Available

The FTPP includes a wide variety of approaches and a number of evaluations conducted or in the planning stages. The following paragraphs describe these activities.

Florida Anti-Tobacco Media Evaluation

The Florida Anti-Tobacco Media Evaluation (FAME) and its follow-up surveys of adolescents were designed to measure the exposure of adolescents to Florida's anti-tobacco media campaign and to analyze tobacco-related attitudes among youth. Results of the FAME surveys, within the focused period of the review, were not analyzed by racial or ethnic groups. FAME relates the effects of changes in tobacco-related attitudes and self-reported behavior to the adolescents' exposure to the media campaign. The evaluation of this project contains process elements, such as measuring and reporting media buys and placements, and output strategies that show a confirmed awareness of the media campaign messages. The process elements document the degree to which media and marketing activities occur in a given geographic region.

Florida Youth Tobacco Survey

The Florida Youth Tobacco Survey (FYTS) is a school-based survey designed to monitor indicators of tobacco use attitudes and behaviors among Florida youth and to assess youth exposure to FTPP-supported school and community programs. The FYTS is analyzed by racial and ethnic subgroups.

Community Partnerships

The Community Partnerships Work Plan focuses on five outcome measures: current tobacco use, tobacco use prevention education, participation in Community Partnerships (CPs), exposure to ETS, and access. CPs are encouraged to design, implement, and evaluate

activities that work best in their communities. One effort of evaluating the CPs is a compilation of report cards with data on these programs. The program includes 67 partnerships, with 57 measures of performance from the baseline of January 1998 through September 1999. Partnerships are evaluated on several measures:

- membership number
- membership demographics—race, ethnicity, age
- organizational representation
- types of activities conducted—youth empowerment (increasing youth participation), membership empowerment (retention/recruitment of members), and prevention programs (identifying resources, targeting initiatives)
- objectives for each program goal—changing attitudes, empowering youth, reducing accessibility, reducing ETS

Minority Tobacco Control Task Force

Another effort at addressing community needs, the Minority Tobacco Control Task Force (MTCTF), was appointed in October 1999 to facilitate participation of minority organizations in tobacco control efforts. MTCTF's mission was to empower minority youth through education and community participation and to develop culturally appropriate educational activities and materials for the different racial/ethnic groups. Evaluations of this program emphasize the need for a definition of minority groups and then an inclusion of all groups, keeping the terms consistent.

School-Based Activities

The FTPP includes a number of evaluations of school-based initiatives, such as the following:

- Fourth Grade Teachers Process Evaluation for Tobacco: Crush It! Program in Florida
- Implementation of Tobacco Prevention Education Curriculum in Florida Schools: A Preliminary Report
- Evaluation of Tobacco Component of the Traffic Law and Substance Abuse Education Course

- ➤ Evaluation of the Eglin Long-Horn of Nightshade County Project
- ➤ American Health Association Youth Fitness and Tobacco Education/Prevention Project
- ➤ Know Smoking Prevention Program
- ➤ Science Tobacco and You: Final Evaluation Report
- ➤ Not on Tobacco (N-O-T) in Florida Study

3.3.2 Primary Questions and Key Findings

The primary evaluation questions from the FTPP's evaluation plan for FY 2000-2001 (University of Miami, 2001) are as follows:

- ➤ To what extent have youth and adult attitudes about tobacco use changed since inception of the program?
- ➤ To what extent have youth been empowered to be agents of change in their communities?
- ➤ To what extent have the accessibility and availability of tobacco products to youth been reduced?
- ➤ To what extent has youth exposure to secondhand smoke been reduced?
- ➤ To what extent has the prevalence of tobacco use among high-risk populations aged 14 to 20 years been reduced?

The evaluation plan does not distinguish between Communities of Color and the population in general; however, Florida's researchers do report initiation rates and smoking rates by race and ethnicity in some of their evaluation reports.

Bauer and Johnson (2001) report adolescent smoking in further studies and reports and add information about the current use of cigarettes by Communities of Color. They write that race and ethnicity are significantly associated with lifetime and current cigarette use, likely representing family and community norms about tobacco use. American Indians have the highest rate for having ever tried cigarettes: they are 50 percent more likely than African American youth to have ever smoked and 2.3 times as likely to be current smokers. Non-Hispanic White youth rank next in

likelihood of having ever tried smoking: they are 30 percent more likely to have done so than African American youth and are 2.3 times as likely to be current smokers. Hispanic smokers are 31 percent more likely than African Americans to have tried smoking and are 1.8 times as likely to be current smokers.

Florida's program was the first in the nation to try to empower youth to be agents of change in their communities, and the program has tried to measure the extent to which this goal has been accomplished. This focus had rarely been seen elsewhere in targeting changes in youth behavior, but more states are now following Florida's lead. Youth participation in community events has remained at or below the preprogram goals. SWAT membership has grown over the 2 years, with non-Hispanic African American students being overrepresented and non-Hispanic White youth underrepresented. The question of youth empowerment, however, is vague and undefined. Evaluation of this program goal will be stalled until the program defines and operationalizes the concept.

Another area that has been investigated by Florida's researchers is youth exposure to secondhand smoke. Bauer and Johnson (2001) conclude from the FYTS that exposure has increased or remained unchanged during the 2 years since the program has been in place and that considerable numbers of young people are being exposed to smoking at home and in public spaces. Changes in the Florida Clean Indoor Air Act may be needed. A recurring theme in the Bauer and Johnson report is the persistently high rates of tobacco use among non-Hispanic White students (and adults), and the report urges that strategies be developed to address this high-risk group.

3.3.3 Planned Evaluations Pertinent to Communities of Color

As mentioned, Florida has recently drafted a number of formative evaluation questions that can be used to plan future programs and evaluations. Some of these can offer insights about tobacco control in Communities of Color. Future studies are likely to address the programs identified in the FTPP's evaluation plan for FY 2000-2001 (University of Miami, 2001).

One such program is the Tobacco Use Prevention Education (TUPE) program. Florida's formative evaluation of this program discussed prevention activities in the community and school setting and determined which interventions are most appropriate for different settings and populations. A future evaluation of this type would add information pertinent to communities and families of color. Because rates of smoking differ across ethnic groups, this evaluation has the potential to identify the strengths of Communities of Color that contribute to lower rates of cigarette use.

Other programs and evaluations are likely to explore the synergistic effects of simultaneous exposure to school-based and community-based programs on tobacco attitudes and other outcomes. Future plans could clarify the definition of empowerment, evaluate how the FTPP empowers youth, and identify the factors leading to successful recruitment and retention of SWAT members. The researchers are encouraged to address the question of why non-Hispanic African American youth are overrepresented and non-Hispanic White youth are underrepresented in this program.

Other issues that were raised in the FTPP's report include evaluating interventions that reduce the accessibility and availability of tobacco products to youth and evaluating the extent to which tobacco merchandising and marketing have changed in retail outlets and in the sponsorship of events. A final issue concerned studies of the changes in youth attitudes about tobacco use in nontraditional settings and how youth in different settings express different cultures of tobacco use.

3.3.4 Evaluation Capacity

Florida seems to be well on the way toward a strong program, with its wide variety of activities and active research team. The FTPP has been encouraged by its External Evaluation Advisory Committee to further develop and implement continuous data collection and reporting systems of policy compliance and ETS exposure. It has also been encouraged to address questions about the relationship between enforcement efforts and key program outcomes (Rogers, 2001). The advisory committee has urged that program and evaluation staff work closely with the CPs and SWAT groups in gathering enforcement-related data at the local level (Rogers, 2000). Potential problems remain for evaluations of community projects—

for example, defining the project to be evaluated, making time for the evaluation, convincing partners of the importance of evaluation, having someone on board to do the evaluation, and being willing to spend funds on evaluation. Florida is well prepared to meet these problems, and the relationship between the external evaluators and the FTPP provides a model that other states can emulate.

3.4 ARIZONA

The primary focus of the Arizona Department of Health Services' Tobacco Education and Prevention Program (TEPP) is to market a tobacco-free lifestyle to pre-adolescents and teens, with pregnant and postpartum women and their partners as a secondary target. The program's goals are to

- ➤ prevent tobacco use,
- ➤ provide cessation services, and
- ➤ protect all Arizonans from ETS.

Initiatives by TEPP can be categorized into seven components:

- ➤ local projects
- ➤ an information network
- ➤ a smokers' helpline
- ➤ a cessation training and evaluation program
- ➤ a statewide media campaign
- ➤ tobacco-free school initiatives
- ➤ two pilot projects
  - √ the Women, Infant and Children cessation project
  - √ CHAMPS (Champs Have and Model Positive Peer Skills, a peer-led prevention project)

The Arizona Department of Health Services established TEPP in 1995 with funds from the 1994 Tobacco Tax and Health Care Act. In November 1994, Arizona raised its cigarette tax from $0.18 to $0.58 per pack to fund the program. TEPP has had an annual budget of approximately $30 million.

Since the implementation of TEPP, the smoking prevalence in Arizona has decreased significantly among adult men and women. The Arizona Adult Tobacco Survey (AATS) found a statistically significant decline between 1996 and 1999 in the smoking prevalence of White adults (23.4 percent to 19.1 percent) and Hispanic adults (21.9 percent to 13.7 percent), but there were no statistically significant changes for the African American population (CDC, May 2001). The decrease among the Hispanic population might be attributed to a combination of TEPP's culturally appropriate efforts in combating tobacco use and the state's cigarette tax increase; Hispanics are four times as likely as Whites and almost three times as likely as African Americans to decrease smoking in response to increases in cigarette prices (Farrelly et al., 2001).

3.4.1 Evaluation Studies Currently Available

During the year in review, TEPP released two evaluation reports: *The 2000 Arizona Youth Tobacco Survey: Middle School Grades 6-8* (Gowda, 2001) and *Findings from the 1999-2000 Arizona CHAMPS Peer Project for Tobacco Use Prevention Surveys* (CHAMPS Tobacco Prevention Program Evaluation Team, 2000). Findings were also abstracted from presentations and posters on the Arizona tobacco control model (Leischow et al., 2000) and presentations from the Arizona Smokers' Helpline (Powers, April 2001; Powers, March 2001; Ruiz-McGill, 2001). Findings from the Arizona Adult Tobacco Survey were published outside our review dates.

3.4.2 Primary Questions and Key Findings

The Arizona CHAMPS Peer Project for Tobacco Use Prevention is a statewide tobacco education program designed to empower students. CHAMPS has three goals:

- ➤ to prevent the initiation of tobacco use by Arizona youth
- ➤ to reduce the number of youth who become current tobacco users
- ➤ to increase knowledge about the consequences of tobacco use

Evaluation findings from the 1999-2000 school year show that representatives from 67 schools attended a CHAMPS training workshop. Of these, 29 schools implemented CHAMPS activities. Data are available from the baseline (fall-winter 1999, pre-CHAMPS activities) and follow-up surveys (April-June 2000).

Key findings from the CHAMPS project reveal the following progress toward its goals:

- To prevent initiation—A statistically significant increase (3.3 percent) occurred in the number of comparison group students reporting that they ever smoked. The change in the CHAMPS group was not significant.
- To reduce the number of current smokers—The increase of current smokers in the comparison group was 67 percent greater than that in the CHAMPS group.
- To increase knowledge—The increase in knowledge of the harmful effects of tobacco was significant for both groups, and there was no statistically significant difference between the groups' increases.

Table 3-3 presents results from statewide evaluations of the Arizona Smokers' Helpline. Evaluators have studied the composition of the clientele served by the helpline (i.e., age, ethnicity, gender, and language distribution). Evaluations have focused on motivation to call the helpline and the media impact on its clientele. Process evaluations have assessed counselor productivity and adherence to protocols. The state also has put in place ongoing programmatic quality controls and outcome evaluations of the quit rate for current and past counseling clients. Other questions focus on the cost per client.

Table 3-3. Arizona Smokers' Helpline Client Demographics Reports—FY 98-99, FY 99-00, and FY 00-01 Comparison Statewide Data

	FY 98-99		FY 99-00		FY 00-01 Q1&2*	
	Quantity	**Percent**	**Quantity**	**Percent**	**Quantity**	**Percent**
Total Client Contacts	6,831	100	6,691	100	2,357	100
Gender						
Male	3,132	45.8	3,064	45.8	1,087	46.1
Female	3,699	54.2	3,627	54.2	1,270	53.9
Counseling Status						
Information and Referral	5,448	79.8	5,109	76.4	2,049	86.9
Counseling	1,383	20.2	1,582	23.6	308	13.1
Ethnicity						
African American	240	3.5	162	2.4	38	1.6
Asian American	40	0.6	38	0.6	20	0.8
White	5,025	73.6	4,495	67.2	1,437	61.0
All Hispanic	653	9.6	1,595	23.8	784	33.3
Native American	65	1.0	58	0.9	16	0.7
Other	159	2.3	137	2.0	23	1.0
No Response	649	9.5	206	3.1	39	1.7
Call Language						
English	6,650	97.4	5,538	82.8	1,740	73.8
Spanish	181	2.6	1,144	17.1	616	26.1

* FY 2000-2001 data is only representative of Quarters 1 and 2.

Source: Powers, Pamela. "Evaluation and Usage of the Arizona Smoker's Helpline and Websites." Presented at the American Public Health Association Meeting, Boston, MA, November 13, 2000.

From the client demographics, we can see that Arizona is increasing its efforts to serve Spanish speakers. This emphasis has sparked interest in different strategies of Spanish television, such as the use of Spanish advertisements, humorous commercials, the Telemundo Telethon featuring helpline counselors, and the Univision helpline walk-through featuring health reporters. The evaluation studies have also shown that Hispanic callers prefer advertisements using

the name Chuck instead of Carlos, that the telethon and health reporter ads motivated Spanish speakers to call in greater numbers than previous Spanish ads, and that Spanish speakers use prerecorded voice tips more often than English speakers do.

Arizona has also conducted its first Youth Tobacco Survey (YTS) of students in 6th to 8th grades. This survey took place among students enrolled in public and charter middle schools in spring 2000. The state's YTS was analyzed with recognition of Communities of Color; however, estimates could not be presented on African Americans, Asians, or Pacific Islanders because the survey included fewer than 100 respondents overall. Some questions on tobacco use or attitudes revealed significant differences among White, Hispanic, and Native American students, as shown in Table 3-4.

Table 3-4. Items from Tobacco Youth Survey with Significant Results Across Groups (Spring 2000)

Item	Whites % (CI*)	Hispanics % (CI)	Native Americans % (CI)
Have ever tried smoking	33.0 (±4.2)	45.1 (±5.0)	53.4 (±9.3)
Ever tried any form of tobacco	41.7 (±3.8)	53.3 (±4.3)	63.3 (±13.5)
Told by a doctor in the past year about dangers of smoking	15.9 (±2.9)	22.3 (±3.3)	26.0 (±11.2)
Told by a dentist in the past year about dangers of smoking	11.2 (±2.6)	18.0 (±2.5)	27.7 (±10.6)
Think it is safe to smoke a year or two	12.1 (±2.3)	18.0 (±2.8)	30.7 (±8.6)
Think smoking makes you look cool	7.9 (±2.4)	13.6 (±2.7)	25.7 (±14.3)

* 95 percent confidence interval.

Source: Gowda, V.R. January 2001. *The 2000 Arizona Youth Tobacco Survey: Middle School Grades 6-8*. Prepared for the Arizona Department of Health Services, Division of Public Health Services, Bureau of Tobacco Education and Prevention Program.

There were also a number of items that revealed no differences among the groups, including the following:

- ➤ smoked before age 11
- ➤ smoked 100 cigarettes or more in lifetime
- ➤ smoked currently
- ➤ smoked frequently
- ➤ smoked on school property
- ➤ smoked any form of tobacco
- ➤ thought they would try smoking soon
- ➤ told by parent or guardian of dangers of smoking

Arizona has also evaluated an anti-tobacco use media campaign, "Tumor-Causing, Teeth-Staining, Smelly, Puking, Stinking Habit," which relies on an affective orientation linked with disgust and various other social emotions related to tobacco use. The evaluation is based on a school youth survey of 1,831 students in grades 6 to 12 from 70 randomly selected classrooms. The sample was approximately 60 percent female; 83 percent were Whites and Hispanics, and 17 percent were Native Americans. Major findings of this study concern the concept of susceptibility. Susceptibility was determined by respondents' reports of uncertainty about whether or not they thought they might smoke a cigarette soon or might smoke a cigarette if offered one by a best friend. Subjects who responded to both items that they definitely would not smoke a cigarette were classified as nonsusceptible; otherwise, they were classified as susceptible. Susceptibility was found to be associated with race. Native Americans showed the highest proportion of susceptibility (52 percent), followed by African Americans (44 percent), Hispanics (43 percent), and all others (between 36 percent and 34 percent). The advertisements proved to have a greater and more positive impact on low-risk groups (nonsusceptible nonsmokers, high performers in school, and students low in reactance) than on high-risk groups. The likelihood to use tobacco, annoyance with the ads, and negative affect was significantly higher among high-risk groups. Some ads did provide evidence of behavioral impact in terms of intent even among students who were

susceptible and at high risk. Ads that were characterized as most effective were also high in disgust.

3.4.3 Planned Evaluations Pertinent to Communities of Color

Arizona plans to use baseline data from youth surveys to enhance the design, implementation, and evaluation of comprehensive tobacco prevention and control programs directed at both youth and adults. One example of this approach is to pay attention to sacred or ceremonial use of tobacco, which differs by race and ethnicity. Although little information is available about planned evaluations, Arizona seems to be well aware of the need to evaluate effectiveness among the different subpopulations and Communities of Color.

3.4.4 Evaluation Capacity

Arizona was one of only seven states whose funding levels for FY 2001 met CDC's best practices recommendation. Current evaluations mostly depend on large surveys and descriptive statistics. Arizona is in the initial stages of a comprehensive evaluation of youth initiatives and has collected state representative baseline data for youth. Previous youth tobacco surveys did not collect information on a population that could be deemed representative of the states. No problems were identified that would prevent future and more in-depth evaluations from occurring.

3.5 MASSACHUSETTS

In January 1993, Massachusetts added a $0.25 surcharge to the purchase price of a pack of cigarettes, with the proceeds going toward the Massachusetts Tobacco Control Program (MTCP). This tax added approximately $39 million in annual revenue to the program. The MTCP is housed in the Massachusetts Department of Public Health's Bureau of Family and Community Health and is one of the largest public health initiatives in the nation. The program has three goals:

- ➤ to prevent young people from initiating use of tobacco products and to reduce youth access to tobacco products
- ➤ to persuade smokers to stop smoking

- ➤ to protect nonsmokers by reducing their exposure to ETS

With a structure adapted from the National Cancer Institute's (NCI's) American Stop Smoking Intervention Study (ASSIST), the state supports a wide variety of programs that promote smoking prevention and intervention. The statewide programs include a media education campaign, a smoker's quitline, and the Community Action Statewide Team for promotion of tobacco control regulations, training and technical assistance, and research and evaluation.

Since the MTCP's inception in 1993, the prevalence of smoking among adults has inched down from 22.6 percent to 20.9 percent in 1999 (Abt Associates, 2001). Per capita cigarette sales, however, have declined more rapidly, falling 32 percent compared with 8 percent in the rest of the nation (minus California).

3.5.1 Evaluation Studies Currently Available

In addition to the annual evaluation by Abt Associates, Inc., process evaluations of Massachusetts' programs are monitored through a number of funded research projects and an ongoing independent evaluation. The sixth annual evaluation as conducted by Abt Associates is available on the MTCP's web site, http://www.state.ma.us/dph/mtcp/report/abtrep.pdf.

Massachusetts has a larger percentage of non-Hispanic Whites than the other seven case study states, yet its minority population makes up 17 percent of the population divided among African Americans (5 percent), Asians and other Pacific Islanders (4.5 percent), and Hispanics (7 percent). As such, its programs target a broad, general audience.

3.5.2 Primary Questions and Key Findings

Early questions addressed by the MTCP focused on whether the program was succeeding in reducing tobacco use and exposure to ETS in Massachusetts. Trend data indicate that the MTCP is a successful program, with smoking rates continuing to go down (Biener, Harris, and Hamilton, 2000). Biener, Harris, and Hamilton report that, prior to the implementation of the surcharge, the 14 percent decline in smoking rate was similar to that in other states, excluding California. Once the surcharge was implemented,

consumption continued to decline by 4 percent in the comparison states but dropped 12 percent in Massachusetts. Since 1993, the state's rate has shown a consistent annual decline of more than 4 percent; among adults in the 48 comparison states, the rates decreased by less than 1 percent a year.

A second evaluation question addressed adult receptivity to the television anti-tobacco campaign. A random-digit telephone survey was conducted in 1993, with a re-interview in 1996. Results indicated that the campaign successfully penetrated the population and was well received by both smokers and nonsmokers (Biener, McCallum-Keeler, and Nyman, 2000). The results also indicated that advertisements depicting suffering as a result of tobacco use might be instrumental in promoting cessation or reinforcing the decision to quit. Although this survey was conducted in Spanish and Portuguese as well as in English, the analysis did not incorporate this information, and there was no indication of the percentage of the population surveyed in any given language.

3.5.3 Planned Evaluations Pertinent to Communities of Color

The Massachusetts Department of Public Health is overseen and guided by an extensive advisory structure that represents the many stakeholders on issues of tobacco control. Recommendations were presented at the Third Annual Tobacco Control Summit in November 1999. Although the summit took place 2 years ago, these data are the latest available for review. The information was found in the sixth annual evaluation of Abt, which was recently placed on Massachusetts' web site (Abt Associates, 2001). The main themes are as follows:

- MTCP should continue its strong support of local, community-based tobacco control efforts.
- MTCP should continue to conduct a strong social marketing effort to counter industry advertising. The media campaign should coordinate closely with community-based tobacco control efforts.
- Cultural competency, broadly defined to include not only ethnic and linguistic minorities but also women, gay, lesbian, and transgender populations, as well as rural

populations, should continue to be a high priority in all program development efforts. Ads and media buys should be refined to better reach diverse populations that have high smoking prevalence or are disproportionately targeted for tobacco industry advertising.

- ➤ MTCP should expand activities that support the development of strong ETS regulations.
- ➤ Providing a full range of nicotine treatment services, including nicotine replacement therapy (NRT), to all smokers should continue to be a high priority of MTCP. Insurance coverage and strategies for increasing demand should be aggressively explored.
- ➤ MTCP research and evaluation efforts should be expanded. There is a particularly critical need to develop and evaluate new program models that are aimed at reducing youth use of tobacco products.
- ➤ The Massachusetts Department of Education and MTCP should increase collaboration on school-based tobacco control interventions for youth.

Compared with the other case study states, Massachusetts has a lower level of persons belonging to Communities of Color. Our research revealed no indication of evaluation questions being asked or addressed from the perspective of Communities of Color.

3.5.4 Evaluation Capacity

Massachusetts has adequate evaluation capacity given the quality of its publications; however, the annual evaluation should be prioritized so that findings are more relevant to present efforts and can be integrated into program planning. At this point in time, the MTCP's evaluation questions are based at broad programmatic levels and are not analyzed by subpopulations or examined with controls for race or ethnicity, which may be a reflection of recommendations presented in 1999. The Massachusetts Department of Public Health receives guidance from an extensive advisory structure that, among others, includes a Committee to End Disparities Among Populations. The committees recommended that the MTCP efforts continue to be directed at improving cultural

competency in program development and at expanding research and evaluation efforts, particularly those targeting reduction of tobacco use by youth (Abt Associates, 2001).

3.6 MARYLAND

Maryland's Tobacco Control Program is supported by funds from the November 1998 Master Settlement Agreement, which awarded $1 billion to the state over 10 years, beginning on July 1, 2000. In 2000, Maryland Governor Parris N. Glendening committed $300 million to tobacco control for the course of the next 10 years. However, the program is currently dealing with a great deal of uncertainty because of an ongoing civil suit with the state's counsel for the tobacco case. The state counsel and his firm are suing the state for 25 percent of the MSA funds, or $1.1 billion. As a consequence, Maryland has placed 25 percent of the tobacco industry funds in escrow.

The Tobacco Control Program has four components:

- a countermarketing campaign
- statewide programs
- community-based programs
- evaluation

Plans for the media campaign have been placed on hold because of the civil suit. Thus, Maryland's program will focus on three areas:

- community health coalitions that will identify, develop, and implement prevention and cessation strategies for communities, schools, and enforcement
- statewide programs that emphasize the elimination of disparities in tobacco use and provide outreach, especially to African American communities
- the Youth Tobacco Survey and the Adult Tobacco Survey—two surveillance surveys designed to evaluate Maryland's success

3.6.1 Evaluation Studies Currently Available

The state recently completed the Maryland Baseline Tobacco Study (MBTS), which included two surveys: the Maryland Youth Tobacco Survey (MYTS), a classroom survey conducted in public school grades 6 to 12, and the Maryland Adult Tobacco Survey (MATS), an adult telephone survey (Maryland Department of Health and Mental Hygiene, Feb. 2001). These surveys provide state-level data for tobacco use among African Americans, Whites, Asians, and Hispanics. Estimates are also provided for African Americans for nearly all 24 political jurisdictions within Maryland, although the other minority group estimates are only available in the larger jurisdictions. Maryland is the first state to conduct coordinated youth and adult tobacco surveys that will generate estimates at the political jurisdiction level.

3.6.2 Primary Questions and Key Findings

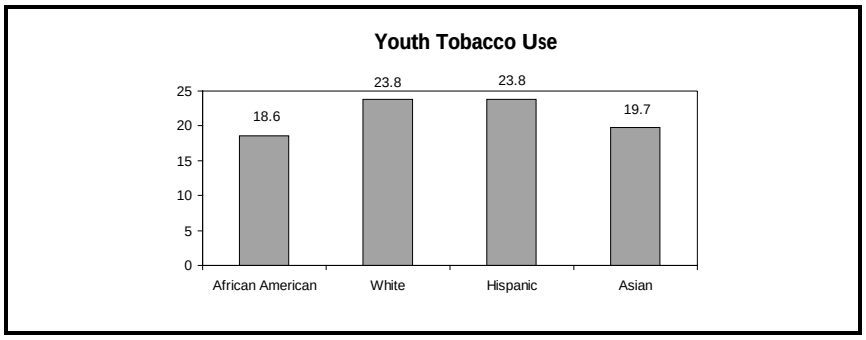
Key questions for Maryland take into account the diversity of the state's population and its tobacco use. The report *Initial Findings from the Baseline Tobacco Study* (Maryland Department of Health and Mental Hygiene, Feb. 2001) highlights tobacco use among Hispanics, African Americans, Asians, and non-Hispanic Whites. Figure 3-1 presents some of these findings. For example, Hispanic and White youth are significantly more likely than African American youth to use a tobacco product (23.8 percent, 23.8 percent, and 18.6 percent, respectively), to use smokeless tobacco (5.0 percent, 3.8 percent, and 2.9 percent), or to smoke cigarettes (17.1 percent, 19.4 percent, and 10.6 percent).

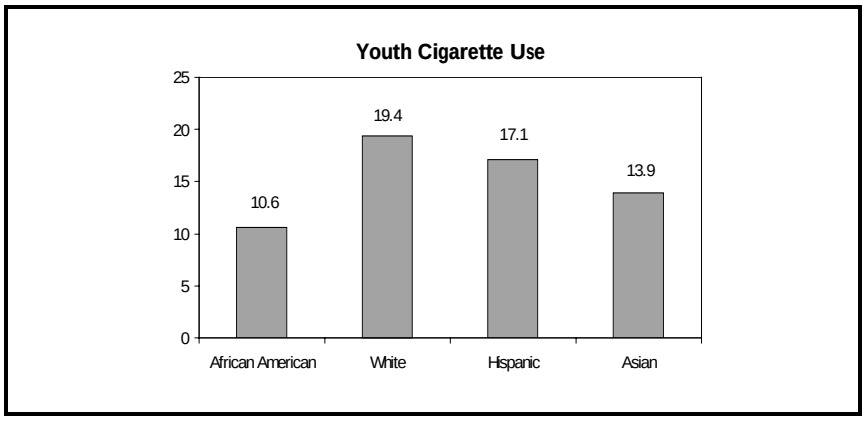
For the adult population of Maryland, the report indicates that African American adults are significantly more likely to smoke than White adults (20.5 percent and 16.9 percent, respectively). White, African American, and Hispanic adults are significantly more likely than Asian adults to use a tobacco product (22.5 percent, 22.0 percent, 21.2 percent, and 7.2 percent, respectively).

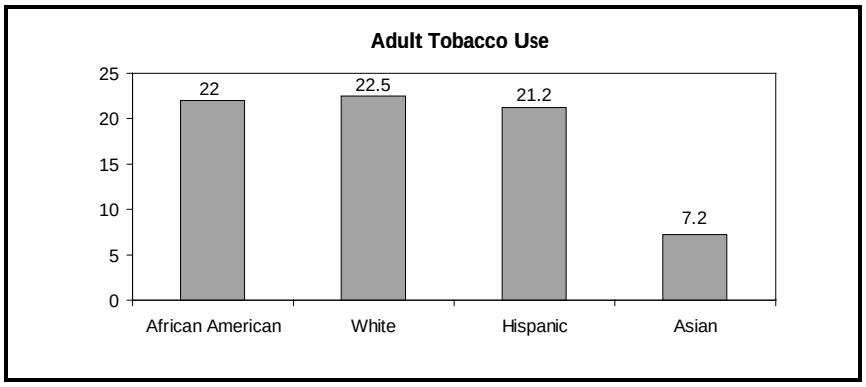
3.6.3 Planned Evaluations Pertinent to Communities of Color

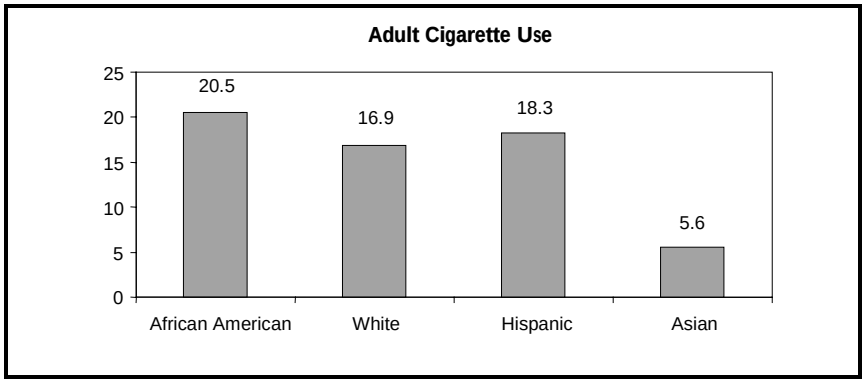
The tobacco control plan for the state of Maryland is still being developed, and a draft is not yet available. However, every effort is being made to include minority community-based organizations

Figure 3-1. Maryland Tobacco and Cigarette Use by Race/Ethnicity









Source: Maryland Department of Health and Mental Hygiene. March 2001. Information on Maryland's Health Disparities in Cancer and Tobacco Use. Fact Sheet. <http://www.mdpublichealth.org/ohp/pdf/factsheet.pdf>.

in the design and evaluation process. Because Maryland has a large African American population, and because this population is inordinately affected with a higher overall cancer incidence and mortality rate than Whites (Maryland Department of Health and Mental Hygiene, March 2001), Maryland has made it a priority to reach out and enable African Americans to effectively participate in its community-based tobacco control and prevention evaluation plans. For example, minority outreach grants totaling $1 million were awarded in 2001 to four community-based organizations to provide outreach and technical assistance to African American and other minorities. These organizations are also responsible for advising and assisting all local health departments in decreasing tobacco use.

3.6.4 Evaluation Capacity

Maryland has already conducted a baseline study of youth and adult tobacco use. If funded as planned, its tobacco control program is close to a level estimated by CDC as effective. Furthermore, the state has already granted $1 million in minority outreach grants to organizations to assist with the evaluation process, among other things. Maryland is making a strong effort to include minority organizations in the design and evaluation of its plan.

3.7 TEXAS

The Office of Tobacco Prevention and Control (OTCP) oversees the Texas Tobacco Prevention Initiative (TTPI) pilot project. OTCP's goals are to

- ➤ eliminate exposure to ETS,
- ➤ promote tobacco cessation among adults and youth,
- ➤ prevent initiation of tobacco use by youth, and
- ➤ identify and eliminate disparities among diverse/special populations.

In 1999, the Texas legislature intensified its efforts in tobacco control by allocating $10 million per year in tobacco settlement funds from *Texas vs. The American Tobacco Company, et al.* for the

TTPI. This pilot project will evaluate the short-term effects of a media campaign and community programs on the tobacco use prevalence among Texans. The Texas Department of Health (TDH) assembled a comprehensive network of partners for this task, making an effort to direct at least a third of the funds toward subcontracts with minority groups and organizations or projects targeting these communities.

The TTPI was designed to determine the costs associated with the different tobacco control programs and to evaluate which combination of programs, with an annual per capita cost of $0.50 to $3.00, will achieve a substantial impact in tobacco use reduction and smoking cessation. The project will evaluate the combination of five types of community interventions (cessation, law enforcement, school-community, a combination of these three interventions, or no intervention) and three levels of media activity (low, high, or no activity).

Preliminary findings of the TTPI indicate that communities that received a larger number of programs (e.g., media campaign, community cessation programs, and school-based programs) experienced a greater decline in tobacco use. The study shows that a significant reduction in tobacco use can be achieved with annual expenditures of $3 per capita through the combination of school and community programs and high levels of media campaign (TDH, 2001b), although the study recognizes that CDC's recommendations of $5 or more per capita may produce better results.

3.7.1 Evaluation Studies Currently Available

The evaluation of the TTPI quasi-experimental community study focuses on the collection of youth and adult tobacco use prevalence rates and adult cessation rates. Youth use was measured through a self-administered questionnaire, the Texas Youth Tobacco Survey (TYTS), which was distributed through schools. Adult cessation was assessed through telephone interviews with a panel of adult smokers. A second random sample of adult interviews, the Adult Youth Tobacco Survey (TATS), was conducted to assess adult prevalence.

The TTPI pilot study was implemented in 18 sites across Texas during 2000. Texas has a similar racial/ethnic make-up to that of

the nation, with the exception of Hispanics: the Hispanic population in Texas is approximately three times as large as it is in the nation as a whole. This unique ethnic distribution was taken into account in the design and implementation of the TTPI initiatives. The 18 sites were chosen because of their high rates of tobacco-related diseases and demographically diverse populations. For example, the Harris County site has a large Asian (5.1 percent) and Hispanic/Latino (32.9 percent) population, and the Houston site has a large African American (27.9 percent) population.

The intensity level of the program's activities across sites ranged from no activity (control area) to single and multiple combinations of initiatives. As mentioned, the initiatives encompassed three levels of media activity (high, low, or no activity) and five combinations of programs (cessation, law enforcement, school-community, a combination of all three programs, or no program). The youth prevention activities were focused on 6th graders (11- to 12-year-olds) because this group of young people is most at risk of becoming smokers.

Preliminary data are available from some of the individual studies and from the overall evaluation. Most interventions, such as the adult media campaign, are still being evaluated, and findings have not been published.

3.7.2 Primary Questions and Key Findings

The analysis of the TTPI focuses on an examination of the relationship between the sites that were exposed to different levels of media or school-community programs and the experimental site (no media or program exposure). The primary evaluation questions are as follows:

- Context Evaluation—What is the context of tobacco prevention and control in pilot areas? (to be determined through analysis of tobacco policy, counter-tobacco funding stream, state and regional networks, community capacity, school capacity, community leader focus groups, and state partnership case studies)
- Process Evaluation—What is happening in the community? (to be determined through surveys or interviews of school principals/health educators, opinion leaders, key informants,

and law enforcement officers, and through surveys on community enforcement, cessation, and program activity evaluation)

- Impact Evaluation—What changes resulted in knowledge, attitudes, values, and behavior? (to be determined through the TATS, TYTS, Health Care Provider Surveys, and Biochemical Validation Study)

The 18 sites included in the TTPI were located in East Texas counties, combinations of counties, and sections within counties. These sites were assigned 14 combinations of three media campaign levels and five community program options. Preliminary findings show that the combination of activities that was most effective in reducing tobacco use involved a high level of media campaign coupled with multiple community programs (TDH, 2001c; Center for Health Promotion and Prevention Research, 2001). The results are described by site group exposure, and the preliminary findings do not report the ethnic make-up of the different sites.

Following are descriptions of some of the preliminary findings. All racial/ethnic components of the initiative or its evaluation that were reported are mentioned here. If not mentioned, the initiative did not have a racial/ethnic component or did not report findings.

Context Evaluation

- A baseline evaluation of ETS policies in worksites (Menefee, 2001) found that most ordinances that restricted smoking in public and private worksites failed to address best practices. For example, of those city-owned buildings restricted by ordinances, only 27 percent provided best practice restrictions.

Process Evaluation

- A youth media campaign, Tobacco Is Foul (Duck TV) was launched in fall 2000 (TDH, 2001a). The campaign was aimed at 11- to 18-year-olds, with a primary audience of 11- and 12-year-olds. The Duck TV concept was inspired by ethnically and culturally diverse Texan youth. Its main messages were that tobacco is not relaxing, is not cool, is stupid, smells, tastes horrible, and is addictive. The

campaign used billboards, television, and radio ads in English and Spanish. At least 33 percent of its media-buy resources were spent on media advertisements that targeted ethnically and racially diverse audiences. Preliminary findings show that youth who were exposed to Duck TV or to school programs were less likely to believe that smoking makes a person look cool (TDH, 2001c).

- The Tobacco Is A Dead End media campaign was directed at 12- to 17-year-old youths and their parents to inform them that it is illegal in Texas for anyone younger than 18 years of age to buy, possess, or use tobacco. The campaign had a secondary preventive message: it is unhealthy to use tobacco. Because of limited funding, the campaign was restricted to select areas. Data for the evaluation of this campaign were collected in 1998 and 1999 through the school-based TYTS. An increase in awareness of the law for youth is noted; however, the rate of the increase is not reported.

- A survey of community opinion leaders and tobacco representatives provided data on their views about tobacco attitudes and tobacco program practices (Gonzalez, 2001). Respondents included 218 opinion leaders (representatives from government, business, education, health, youth, and ethnic organizations) and 161 TDH-funded tobacco program coordinators. The results note that efforts of the local tobacco prevention initiatives were perceived as extremely effective or very effective by only 22 percent of community leaders, compared with 49 percent of opinion leaders. The preliminary findings are not reported by race.

- The Texas Youth Tobacco Awareness Program uses an 8-hour awareness class for minors who are cited for tobacco possession. The program's activities are evaluated by collecting surveillance data. In January 2001, 415 trained instructors in 92 percent of all Texas counties served approximately 4,500 youth per year (TDH, 2001a). Data on the program were collected from students before and after the 8-hour class and followed up by a telephone survey at 3 and 6 months and a biochemical validation test. Facilitators were also surveyed about the class activities. Initial findings

from the evaluation show that the majority of youth attending the class are male (71 percent) and average 16 years of age. The breakdown by ethnic group is as follows: Whites, 75 percent; Hispanics, 12 percent; Blacks, 4 percent; Asians/Pacific Islanders, 2 percent; and Native Americans, 2 percent. The telephone surveys showed that 40 percent of youth were tobacco free 3 and 6 months after the class. Of those youth who still reported tobacco use, 59 percent had tried to quit as a result of the class. The biochemical validation part of the study is offered to a limited number of youth, and only 30 had provided saliva samples at the time of the evaluation.

- Five baseline evaluation and surveillance activities were reported in FY 2000-2001 that dealt with law enforcement: The Law Enforcement Officer Survey, the Judicial Survey, the Tobacco Is A Dead End media campaign, Operation Storefront, and the Texas Youth Tobacco Awareness Program. Of these, only the latter presents findings by race.

Impact Evaluation

- Baseline data from the 2000 TYTS are reported by grade, and data from the 2000 TATS are reported by gender. Adult men, adult women, high school students, and middle school students in pilot areas outside of Harris County were more likely to be current users of any form of tobacco than men, women, or students in the pilot areas outside of Harris County (TDH, 2001b). The evaluation does not indicate whether or not the findings are significant.

- The Tobacco Use Prevention Education (TUPE) program surveyed 128 school health coordinators and 131 school principals on classroom instruction activity levels, nature of instruction, faculty and staff attitudes, and staff development preferences (Boerm, 2001). Only 19 percent of the principals reported extremely active provision of TUPE.

3.7.3 Planned Evaluations Pertinent to Communities of Color

Preliminary results of TDH's tobacco control activities are presented in various reports, with gender and racial/ethnic group findings

given for most. The final findings from the TTPI pilot study and recommendations for future initiatives will be presented to the Texas legislature in 2002. These findings will be used to develop a state tobacco control and prevention plan and its evaluation. However, even though current interventions target diverse communities throughout Texas, our research did not find evidence regarding the nature of community-based interventions or of their use of culturally sensitive materials.

3.7.4 Evaluation Capacity

Texas has the funding and the means to evaluate its TTPI pilot project, and there are no barriers to the evaluation of the interventions that target minorities. The results of this pilot will be summarized in 2002 into a tobacco prevention and control program that presents the most effective way to promote, and evaluate, a reduction in tobacco use across the diverse populations in Texas.

3.8 MISSISSIPPI

The Partnership for a Healthy Mississippi (PHM) was established in October 1997 with funds from the $62 million tobacco settlement. It encompasses more than 60 state and 600 local organizations. The PHM's primary goal is to make the social and cultural climate in Mississippi intolerant of tobacco use by youth. To accomplish this goal, three key objectives were set:

- to reduce the number of Mississippi youth using tobacco products
- to protect youth and other nonsmokers from ETS
- to encourage youth involvement in advocacy and policy initiatives

The five components of the PHM are as follows:

- a school nurse program
- a media campaign
- a teacher education and research project
- law enforcement initiatives

- community and youth programs (targeted programs, Community Youth Partnerships, faith-based programs, Reject All Tobacco [RAT] Groups, Frontline youth advocacy, and Students Working Against Tobacco [SWAT] teams)

Surveillance data have shown that the PHM has been successful in lowering tobacco initiation rates for public high school students. The Mississippi Youth Tobacco Survey (YTS) shows a statistically significant decrease in the number of public high school students who have ever used cigarettes, cigars, or smokeless tobacco, from 77.2 percent in 1999 to 71.5 percent in 2000 (CDC, 2000; CDC, Nov. 2, 2001). The data also show a statistically significant decrease in smokeless tobacco use among African American middle school students, from 6.5 percent in 1999 to 2.7 percent in 2000.

3.8.1 Evaluation Studies Currently Available

The PHM youth and adult initiatives have been designed with the premise that ethnic and racial groups respond differently to health messages. Because of the large African American population in Mississippi, a specific strategy was developed for that group. The population of Mississippi is 36 percent African American, 61 percent White, less than 2 percent Hispanic, and less than 1 percent each Asian, Native Hawaiian/Pacific Islander, or American Indian/Alaska Native. Reports available for the period in review include a summary of evaluation findings provided by the University of Southern Mississippi (PHM, 2001), the *Overall Evaluation Benchmark Report* (Mississippi State University, 2000), poster and presentation slides (McMillen and Cosby, 2001), and two manuscripts under review, one on church-based prevention (Reinert et al., 2001) and one on elementary teachers' responses to tobacco prevention (Carver et al., 2001).

3.8.2 Primary Questions and Key Findings

The 1999 Mississippi Social Climate Survey was conducted to measure the acceptability of tobacco use and the support for tobacco control. The population surveyed was representative of the racial and ethnic make-up of Mississippi. The respondents were 66.9 percent White, 31.3 percent African American, 0.3 percent Asian or Pacific Islander, 0.3 percent American Indian or Alaska

Native, and 0.3 percent "other." The results relevant to Communities of Color are as follows:

- Tobacco use is less common and restrictions of tobacco use more common among African American respondents than White respondents.
- African Americans are more likely than Whites to support restrictions on tobacco use in educational environments.
- African Americans are more likely than Whites to endorse government regulations of tobacco.
- African Americans are more likely than Whites to support restrictions on tobacco use and tobacco advertisements in stores.
- African Americans are more likely than Whites to report the existence of an employer smoking policy.
- African Americans are more likely than Whites to endorse an increase in tobacco taxes to fund adult cessation programs.
- African Americans are more likely than Whites to support a ban on tobacco advertisements at sporting events.

Another tool used by the state to measure prevalence of tobacco use among Mississippi adults is the biannual Behavioral Risk Factor Surveillance System (BRFSS) (CDC, Nov. 8, 2001). When compared with 1998 BRFSS data, the 2000 BRFSS reveals no statistically significant changes in the prevalence of current adult smoking among any racial group.

The Mississippi YTS is used to measure knowledge, attitudes, and behaviors concerning tobacco use among youth. The YTS has been conducted in 1998, 1999, and 2000. However, few of the findings from these surveys were published or presented during our review period of June 1, 2000, through June 30, 2001. According to findings from the 1999 YTS (CDC, 2000), current cigarette use among White and African American youth in grades 9 through 12 was reported as 18.4 percent for African Americans and 43.8 percent for Whites.

The principal interventions used by Mississippi to reach communities are Community Youth Partnerships (CYPs), faith-based programs, and targeted programs (52 percent African American and 48 percent White). Evaluation activities for these interventions assess knowledge and attitudes, awareness, and programmatic effectiveness.

The PHM developed the CYPs as a way to achieve long-term cultural changes at the local level. Of these partnerships, 42 percent are African American and 58 percent are White. Evaluation data have not been published.

The faith-based health initiative funded by PHM is a grass-roots youth tobacco prevention program designed to coincide with earlier community and school-based efforts. During the 1998-2001 period, 95 percent of all faith-based program funding was directed at organizations that mostly comprised African Americans. Partnerships between faith-based organizations (FBOs) and health initiatives have proven to be useful in planning community-based tobacco prevention programs, especially in Mississippi, where African Americans represent over one-third of the population and church attendance is higher than in most areas of the country. In the third wave of funding for the program, an intensive statewide training workshop for grant recipients was held, and extensive follow-up was conducted with all participants to measure progress.

The African America Initiative is a combination of multimedia advertising, faith-based programs, and other initiatives that target African American youth. The initiatives "infiltrate" the existing tobacco control programs with their own anti-tobacco messages.

Lessons learned from evaluations of community programs include the following:

- ➤ Churches reach citizens in a way that a widespread, impersonal media campaign does not.
- ➤ Tobacco prevention community coalitions sometimes fail to garner participation and support from all segments of their respective community. FBOs fill gaps across ethnicity, gender, and socioeconomic status.
- ➤ FBOs bring together different age groups.

- ➤ Small rural FBOs yield community challenges.

3.8.3 Planned Evaluations Pertinent to Communities of Color

Mississippi plans to target several areas to provide a comprehensive approach to tobacco prevention. The goal of its cessation program is to ensure the availability of quality services and programs for youth and adults and to develop or modify treatment programs to address the needs of diverse Mississippi populations. Specific strategies to accomplish this objective are to

- ➤ utilize needs assessment to clarify diverse populations,
- ➤ link programs to populations, and
- ➤ continually evaluate programs to determine effectiveness.

3.8.4 Evaluation Capacity

In 1999, four research entities from three Mississippi universities formed the University Evaluation Group, which is responsible for evaluation of the PHM. This group has the ability and means to conduct an effective evaluation. However, published benchmark findings from several PHM initiatives do not report data by racial or ethnic group.

3.9 WASHINGTON

Washington's Tobacco Prevention and Control Program has only been in operation since July 2000. The program has four major goals:

- ➤ to prevent youth initiation
- ➤ to promote quitting among youth and adults
- ➤ to eliminate exposure to ETS
- ➤ to eliminate disparities in tobacco use among different populations

To achieve these goals, the program is segmented into six components:

- community-based programs
- school-based programs
- cessation
- public awareness and education campaign
- youth access
- an assessment and evaluation of all components

The first-year funding allocation for the program was $18 million (CDC, 2001). For FY 2002 it was increased to an estimated $20.4 million ($17.2 million from settlement funds and $3.2 million in grants). In both years the majority of the funds came from the settlement dollars. For FY 2002, the Washington Department of Health (WDOH) has increased funding for community and tribal contracts by 10 percent, is supporting a comprehensive planning process for underserved populations, and is expanding the adult quit line hours to allow more live response to multicultural callers on weekends and evenings.

3.9.1 Evaluation Studies Currently Available

Because WDOH launched its Tobacco Prevention and Control Program in July 2000, it is too early for the state to have evaluation studies or to have key questions and findings. Programs are being instituted and evaluations planned.

Washington's evaluation plan will establish the prevalence of use, as well as changes in use, attitudes, and beliefs, for all four targeted racial/ethnic groups—Asians and Pacific Islanders, Native Americans, African Americans, and Hispanics—with a strong emphasis on the evaluation of activities focused on Native American tribes. Among the programs to be evaluated is the Washington Quit Line, modeled after similar effective programs in Oregon and California. The adult quit line services were inaugurated on November 15, 2000, with a separate Spanish language quit line as well as a TTY line for the hearing impaired. Referrals to community-based cessation programs and counseling are offered in 44 different languages. For the uninsured and

Medicaid-covered callers aged 18 and older, the quit line also offers nicotine replacement therapy. During the first 7 months of its operation, the quit line received over 12,500 calls.

Other programs that will be evaluated include school-based programs based on CDC's Guidelines for School Health Programs. The public awareness and education campaign consists of television and radio ads, billboards, promotions in movie theaters, kiosks in retail malls, and a web site aimed at 4th through 12th graders. The youth access component is developing statewide protocols for retailer compliance checks and exploring methods of retailer education. WDOH collected baseline information on tobacco-related attitudes, knowledge, and beliefs among youth and adults and uses a web-based reporting system to collect data at the county level from school- and community-based programs, including tribal communities. The data collected identifies all four targeted populations: African Americans, Hispanics, Asians, and Native Americans. There is also a special assessment of target populations (English- and non-English-speaking pregnant women, youth, and adults interested in quitting) to measure the progress of the program activities.

The long-term evaluation of the program will be based on the reductions in rates of tobacco use among Washington's population. Two surveys will measure these results—the Washington State Survey of Adolescent Health Behaviors, a school-based survey, and the Behavioral Risk Factor Surveillance System (BRFSS), an adult telephone survey. Special efforts have been made to include the Native American population, and the tribes are coordinating and conducting the BRFSS within their own communities. The program goals include an expected 8 percent reduction in youth smoking and a 9 percent reduction in adult smoking within the first 3 years of its implementation.

The short-term evaluation of the program will be based on ongoing measurements of changes in awareness and attitudes of tobacco use. A youth quit line, also available in 44 different languages, is scheduled to begin in January 2002, targeting youth aged 13 to 18.

3.9.2 Evaluation Capacity

Aided with the receipt of grant funds from CDC, WDOH is developing a long-term strategic plan to reduce disparities. WDOH has estimated close to 8 percent of its settlement funds ($1.3 million) for the assessment of its programs. The state seems to have the capacity to evaluate how its tobacco control initiatives are affecting culturally diverse groups.

4 Recommendations

This section presents our observations on future evaluation needs of tobacco control programs pertinent to Communities of Color. The observations presented in this section are made on the basis of the systematic review of recently published evaluations of interventions and an analysis of eight key state case studies. The purpose of this study was to examine current evaluations of tobacco control in Communities of Color, identify future evaluation plans, and determine if states have the capacity to conduct evaluations. By integrating the two approaches, review of published literature and review of key states, we are able to make the following recommendations.

We encourage the states to include in their evaluation plans a protocol for sampling procedures that addresses the four Communities of Color: Hispanics, African Americans, American Indians and Alaska Natives, and Asian Americans and Pacific Islanders.

These four groups currently represent about one-fourth of the population of the nation; however, this fact could not have been deducted by studying the findings of evaluations of population-based initiatives in the years 2000 and 2001. A rigorous surveillance and evaluation research protocol that includes Communities of Color is needed if we are to effectively reduce prevalence and initiation among the country's population. The system would monitor how the state's racial and ethnic groups are exposed to, participate in, and react to the various tobacco control programs, in addition to tracking tobacco-related behavior and

exposure. Few evaluations exist that analyze programs serving Communities of Color, and the knowledge base needs to be expanded both in number of evaluations and in the segments of the population covered. Specifically, states ought to look at whether the goals and objectives of the program were accomplished across all segments of the population or whether some populations were not as responsive to certain program elements. We found only six articles in the published literature that mentioned race or ethnicity, and they dealt with adolescent smoking or mothers of young children (Albrecht, Higgins, and Lebow, 2000; Bauman et al., 2001; Bauer et al., 2000; Hovel et al., 2000; Landrine, Klonoff, and Reina-Patton, 2000; Litrownik et al., 2000). No peer-reviewed evaluation dealt with adult members of Communities of Color, and the programs that target adolescents in Communities of Color neglect youth who are not students. Only Maryland and Massachusetts had high school completion rates as high as 90 percent, followed by Washington at 87 percent and Florida at 85 percent. The remaining four states had high school completion rates of 75 percent to 82 percent (U.S. Department of Education, 2000). Thus, a sizeable population of adolescents who do not attend school-based programs is excluded from many evaluation studies.

We recommend that states be encouraged to translate their evaluations into formats that are publishable and to disseminate their findings to the tobacco control community.

As an example, the Centers for Disease Control and Prevention (CDC) could sponsor a few pages in a leading journal (e.g., notes from the field in the *American Journal of Public Health*) or use their National Tobacco Control Program State Exchange web sites for states to post evaluations of community-based projects for Communities of Color. CDC's program allows access to information on state tobacco control programs, training, documents, and activities. It is possible that interventions on one population or in one area of the country could be transported successfully to other areas of the United States. Strategies evaluated in one geographic region could be evaluated in another, allowing for comparisons and necessary adaptations. Through this mechanism, states could share evaluation plans and seek other states that might serve as partners in evaluation. By working together, they may be able to address issues

of effectiveness of interventions in their local communities and in Communities of Color. Localities that are similar but in different states might potentially serve as control groups for a county in another state, similar to the study by Secker-Walker et al. (2000). Experimental studies with control groups would strengthen research involving Communities of Color that form only a fraction of the larger population.

We encourage evaluators to conduct outcome evaluations in community programs and to ask new questions about interventions to determine their effects on Communities of Color.

We recognize that it is necessary to document the number of people served but suggest that evaluations progress from studying the process to determining the effect of the intervention in the community. State tobacco control offices might need to strengthen their ties with the local community. Local communities might not have the resources to conduct an outcome evaluation and are likely to need evaluation assistance.

Because the National Institutes of Health is encouraging all researchers to include racial and ethnic populations in their studies and because national databases include information on persons by ethnicity and race, we recommend that more evaluations be conducted that examine secondary data sets.

For example, evaluators could measure trends in mortality rates of persons of color as a function of their smoking behavior, or compliance to legislation prohibiting sales to minors, either by race/ethnicity or by geographic area.

Because all states target prevention that focuses on adolescents in middle schools and high schools, we urge that an evaluation synthesis be conducted on school-based programs.

To the best of our knowledge, the Task Force on Community Preventive Services has yet to publish its evaluation synthesis of these interventions. Because prevention is a priority of tobacco control programs and all of our case study states, this matter should receive significant attention. From our review of state programs, we know that African American students in Florida are attracted to the

SWAT program. Are evaluations of this program available in Florida or other states? We know that Native Americans, African Americans, and Hispanics who reside in Arizona are susceptible to peer pressure. Does a program such as SWAT help to strengthen susceptible teens?

We encourage state health departments to support special initiatives of local community programs that contain a rigorous surveillance and evaluation design.

Involving the community in discouraging tobacco use, addressing smoking cessation, and promoting smoke-free environments can empower the community and facilitate the formation of coalitions—a formidable tool in the fight to support tobacco control strategies. An example would be for the state to increase monetary resources related to the provision of assistance to communities in the promotion of cessation policies. Another would be to encourage the state and health care providers to find culturally sensitive ways to make nicotine replacement therapies, such as nicotine patches, available to low-income persons and to rigorously evaluate their effectiveness within each racial and ethnic groups.

We recommend the development of best practices of tobacco control for Communities of Color.

This recommendation is based not on the argument of racial disparity but on good public health practice. If smoking addiction occurs at different ages, or if Native American and African American adolescents are more likely to believe they can smoke for a short period without becoming addicted (as shown in Arizona), interventions need to address these different needs. Good public health practice calls for the development of interventions that serve known needs and later evaluations of these interventions.

We recommend that more national, state, and local evaluations be conducted using secondary data sets to better understand the impact of tobacco control programs on racial/ethnic smoking patterns.

State tobacco control programs are often multifaceted and include mass media campaigns, community-based programs, telephone

quitlines, school-based tobacco prevention education, and other interventions. More research is needed to systematically evaluate the success of these various interventions for Communities of Color. Such research would help program administrators ensure that these programs are beneficial to all.

5 References

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Appendix A: Qualitative and Quantitative Data Collection Instrument for Amended Community Guide

Tracking Information

A. Number from master list

B-E. State — This question pertains to the state or states that received the intervention. Use code 77 for five or more states. Use numbers, not abbreviations (e.g., use 1 for Alabama, not AL).

1.	Alabama	AL
2.	Alaska	AK
3.	Arizona	AZ
4.	Arkansas	AR
5.	California	CA
6.	Colorado	CO
7.	Connecticut	CT
8.	Delaware	DE
9.	District of Columbia	DC
10.	Florida	FL
11.	Georgia	GA
12.	Hawaii	HI
13.	Idaho	ID
14.	Illinois	IL
15.	Indiana	IN
16.	Iowa	IA
17.	Kansas	KS
18.	Kentucky	KY
19.	Louisiana	LA
20.	Maine	ME
21.	Maryland	MD
22.	Massachusetts	MA
23.	Michigan	MI
24.	Minnesota	MN
25.	Mississippi	MS
26.	Missouri	MO
27.	Montana	MT
28.	Nebraska	NE
29.	Nevada	NV
30.	New Hampshire	NH
31.	New Jersey	NJ
32.	New Mexico	NM
33.	New York	NY
34.	North Carolina	NC
35.	North Dakota	ND
36.	Ohio	OH
37.	Oklahoma	OK
38.	Oregon	OR
39.	Pennsylvania	PA
40.	Rhode Island	RI
41.	South Carolina	SC

42.	South Dakota	SD
43.	Tennessee	TN
44.	Texas	TX
45.	Utah	UT
46.	Vermont	VT
47.	Virginia	VA
48.	Washington	WA
49.	West Virginia	WV
50.	Wisconsin	WI
51.	Wyoming	WY
52.	U.S. as a whole	
53.	U.S. minus the states with major tobacco control efforts	

F. Topic

1. Access
2. Cessation
3. Prevention/initiation
4. Environmental smoke
5. Legislation
77. More than one topic

G. Subtopic

1. Minors
2. Persons of color
3. Both minors and persons of color
4. Women only
5. Pregnant women

H. Reviewer — Each reviewer is assigned a number.

I. Study type

1. Published article
2. Technical report
3. Unpublished dissertation/thesis
4. Abstract/presentation
5. Book/book chapter
6. Other

Part I. Classification Information

J-K. Study design — Use study design algorithm. This question refers to the study designed to evaluate the intervention. Choose the following codes for J (first design code) and K (second design code):

1. Randomized trial (experiment) individual
2. Randomized trial (experiment) group
3. Nonrandomized trial with individuals
4. Nonrandomized trial with one or more comparison groups
5. Prospective cohort study
6. Other designs with concurrent comparison groups
7. Retrospective cohort study
8. Case-control study
9. Time series study
10. Before-after study
11. Cross-sectional study
12. Noncomparative study
13. Other

L-M. Intervention components — Use the following codes for L (first intervention component) and M (second intervention component). This question refers to the actual intervention.

1. Provision of information only: Interventions that try to change knowledge, attitudes, or norms. Intervention methods might involve instruction (e.g., classes, assemblies), small media (e.g., brochures, leaflets, posters, letters, newsletters), or large media (e.g., television, radio, newspapers, billboards).
2. Behavioral: Interventions that try to change behaviors by providing necessary skills or materials. Examples are modeling or demonstration, role playing, participatory skill development, individual benchmarking (i.e., goal setting and achievement), providing feedback, providing incentives or penalties, or providing materials necessary to perform the desired behavior (e.g., condoms, car seats).
3. Environmental: In the physical environment, might involve adding to (e.g., fluoride in water systems), changing (e.g., resilient playground surfaces), or subtracting from (e.g., lead in gasoline and paint) the environment. In the social environment, might include increasing employment opportunities (e.g., welfare-to-work programs) or development of community coalitions to change social systems (e.g., Detroit's "Angel's Night" anti-arson program).
4. Legislation/regulation/enforcement: Interventions that try to change behaviors or alter disease risk factors by legislating particular behaviors, regulating risk factors, and enforcing those laws and regulations (e.g., seat belts, vaccination laws, increased tobacco taxes).
5. Clinical: Interventions that aim to increase access to and assurance of clinical care (patient focused).

6. Public health or medical care system: Interventions that aim to change the public health or clinical care systems to increase or improve delivery of services (system focused). Examples: development of registries and surveillance systems; incentives to develop hospital policies for standing orders for vaccine administration.
7. Other

N. Part of a larger intervention?

1. No
2. Yes

O-Q. Primary outcome measure(s) — Use the following numeric codes for O (first outcome), P (second outcome), and Q (third outcome). Descriptive information should be entered on a separate sheet for qualitative data, with tracking number indicated. Code the specific construct that was measured with the qualitative data. For example, for "behavior—minors attempting to buy cigarettes,"code behavior in column O and "attempt to buy cigarettes" with the qualitative data.

1. Behavior (e.g., observed correct use of child-restraint devices by children aged 5 or younger)
2. Other intermediate or mediating outcome (e.g., an outcome that precedes or is correlated with one or more health outcomes and stems from exposure to a determinant)
3. Nonfatal health outcome (e.g., nonfatal motor vehicle injury rate)
4. Severity of illness/injury (e.g., rates of lung cancer)
5. Death
6. Surrogate outcome (e.g., an outcome that is considered to be a proxy for health or other outcomes of interest)

Part II. Descriptive Information

Description of the Intervention

Use the following parameters to describe the intervention. Leave room on sheet for ALL qualitative data.

R. What was the intervention? Describe the level or scale of focus (i.e., individual, family, group, community, or general public). Describe services, materials, and other information that were delivered or how the policy or law was enacted (include information about enactment, implementation, and enforcement. Code qualitative data on separate sheet for this tracking number.

S. How is the intervention being delivered? Describe the person who delivered the intervention, not the evaluation (e.g., health professional, volunteer, peer). Explain how they were trained and how they were assigned. Describe how the target population learned about the intervention. Describe the time period, frequency, and duration. Describe the scope of the intervention (i.e., how many members of the target groups were reached by the intervention). Describe the extent of coordination with

other agencies/organizations and the targeted community. Code qualitative data on separate sheet for this tracking number.

T. Who is being targeted? This answer might be broader than the sampled persons in the evaluation. Briefly describe the characteristics of the targeted population. Code qualitative data on separate sheet for this tracking number.

U. Where is the intervention being delivered? The intervention might be delivered in a particular type of setting or communitywide. This parameter should be described for the intervention as it was implemented, which might be a broader setting than that studied in the evaluation. Code qualitative data on separate sheet for this tracking number.

V. Other characteristics of intervention that should be noted — Describe on separate sheet that includes tracking number.

W. Theory described

1. Theory not mentioned
2. Theory mentioned but no further description or discussion
3. Yes (If yes, list theories.)

X-Z. Type of organization that implemented the intervention — This question refers to organizations that directly interacted with the population under study, not organizations that might have provided scientific or financial support. Use the following codes for X (first type of organization), Y (second type of organization), and Z (third type of organization). Check all that apply.

1. Managed care organization
2. Other clinical organization
3. Academic organization
4. Community-based organization
5. Federal public health agency
6. State public health agency
7. Local public health agency
8. Federal government agency
9. State government agency
10. Local government agency
11. Other
12. Unknown
13. Does not apply

AA. Interventions for a comparison or control group — Write here the page where this information is found, but enter code 1, 2, or 3.

1. No comparison group
2. No intervention for comparison group (purposefully or inadvertently)
3. Intervention applied to comparison group

Evaluation Study Characteristics

These questions refer specifically to the setting and population that were studied in the evaluation of the intervention.

Place/Time

AB. Was the study done in the United States?

1. Not United States
2. United States

AC-AF. Location — Code states that serve as control states in the same way as states that received the intervention. Use previous state codes for AC (State 1 in evaluation study), AD (State 2 in evaluation study), AE (State 3 in evaluation study), and AF (State 4 in evaluation study). Code 77 if necessary.

AG. Was the study done in an urban, suburban, or rural setting? Code as described by the author. Use "mixed" only if the intervention was applied to the entire population of a large geographic area that likely covers urban, suburban, and rural settings.

1. Urban
2. Suburban
3. Rural
4. Mixed

AH-AJ. Setting — What was the setting in which the intervention was implemented (intervention and control settings) for the purposes of conducting the study? Check all that apply. Use the following codes for AH (Setting 1), AI (Setting 2), and AJ (Setting 3):

1. Hospital
2. Clinic or health-care provider office
3. Nursing home
4. Child day care center
5. Drug treatment facility
6. Mental health setting
7. Community-based organization
8. School
9. Workplace
10. Religious institution
11. Home
12. Prison
13. Street
14. Shelter
15. Communitywide (statewide)
16. Stores
17. National – All states
18. National – States without major tobacco control programs

19. One or more states — Describe here ONLY if it gives additional information other than that given in B–E and AC–AF.
20. Other (Specify on back of coding sheet.)

AK-AO. How were the outcomes and other independent (or predictor) variables measured? Use the following codes for AK (Measure 1), AL (Measure 2), AM (Measure 3), AN (Measure 4), or AO (Measure 5). Start with how outcomes were measured. Use the qualitative sheet for detailed and additional information. On the qualitative sheet, note whether it was an outcome or independent variable and whether it was a resource utilization, observation, and so on.

1. Resource utilization (e.g., hours of media exposure or number of reminders sent)
2. Observation
3. Interview (telephone or in-person)
4. Self-administered questionnaire
5. Laboratory test
6. Record review
7. Other

AP. Where were outcomes measured?

1. Same as intervention setting
2. Different from intervention setting

AQ-AS. If different, use the following codes for AQ (Setting 1), AR (Setting 2), and AS (Setting 3).

1. Hospital
2. Clinic or health-care provider office
3. Nursing home
4. Child day care center
5. Drug treatment facility
6. Mental health setting
7. Community-based organization
8. School
9. Workplace
10. Religious institution
11. Home
12. Prison
13. Street
14. Shelter
15. Communitywide (statewide)
16. Stores
17. National – All states
18. National – States without major tobacco control programs
19. One or more states — Describe here ONLY if it gives additional information other than that given in B–E and AC–AF.
20. Other (Specify on back of coding sheet.)

AT. Time period and interval outcome(s) measured — Year in which first outcome was measured (four digits).

For the follow-up study, indicate time between measures by first coding the unit number, then coding whether the time period is years, months, or days (e.g., 2 months would be coded 2 in AU and 2 in AV for months).

AU1. Time between baseline and Measure 1

AU2. Time between Measure 1 and Measure 2

AV. Type of measure

1. Years
2. Months
3. Days
4. Weeks

AW. How many follow-ups were there?

(If you feel this information does not capture the study, describe here. Insert sheet if necessary.)

Person (Study Population) (i.e., population in the evaluation)

AX1. Investigator allocated or investigator observed persons or groups

1. Investigator allocated
2. Investigator observed

AX2. Eligibility criteria — Use the following codes for eligibility of the study population if possible. If not possible, see below.

1. Age = adolescents, if not based on school grade
2. Age = 18-64
3. Age = 65+
4. Primary grades
5. Elementary grades
6. High school
7. Black or African American
8. Hispanic or Latino
9. Asian
10. Male
11. Female (not pregnant)
12. Pregnancy
13. Race or ethnicity and pregnancy
14. Age and pregnancy
15. Adult women only
16. More than one minority group (list)

AX3. Period of evaluation — Use the following codes. If both sets of data are given (baseline and follow-up), code 1 and use that information below.

1. AY–BT are baseline
2. Only follow-up data are given

AY. Mean age of group receiving the intervention

AZ. Minimum age of group receiving the intervention

BA. Maximum age of group receiving the intervention

BB. Percent male receiving the intervention

BC. Percent American Indian or Alaskan Native receiving the intervention

BD. Percent Asian or Asian Pacific Islander receiving the intervention

BE. Percent Black or African American receiving the intervention

BF. Percent White receiving the intervention

BG. Percent Hispanic or Latino receiving the intervention

BH. Percent non-Hispanic White receiving the intervention

BI. Socioeconomic status (SES) of those receiving the intervention

1. Low
2. Middle/upper

BJ. Mean age of control group

BK. Minimum age of control group

BL. Maximum age of control group

BM. Percent male in control group

BN. Percent American Indian or Alaskan Native in control group

BO. Percent Asian or Pacific Islander in control group

BP. Percent Black or African American in control group

BQ. Percent White in control group

BR. Percent Hispanic or Latino in control group

BS. Percent non-Hispanic White in control group

BT. SES of control group

1. Low
2. Middle/upper

BU1. Number of groups or individuals in treatment condition, allocated or observed

BU2. Number of persons in control condition, whether observed or allocated

BU3. Subjects

1. Individuals
2. Groups
3. Communities
4. Stores
5. Other (describe)

BV. Ultimately affected population (briefly describe)

BW. Did evaluation conclude that the intervention was successful?

1. No
2. Yes

BX. Is the sample size sufficient?

1. No
2. Yes

BY. Is the power calculation given?

1. No
2. Yes

BZ. Are the statistics sound?

1. No
2. Yes

CA. Do the results indicate something relative to Communities of Color?

1. No
2. Yes

CA1. Fill in the following statistical data: For each intervention for a given outcome, give the percentage or mean at baseline, then the percentage or mean at follow-up. If time

series, give the percentage or mean in each period. Report ONLY significant effects. Repeat for all interventions for all outcomes in the study.

Part III. Study Quality

Description

CB. Was the study population well described?

1. Yes, time, place, and person are well described
2. No, time is not well described
3. No, place is not well described
4. No, person is not well described
5. No, time and place are not well described
6. No, time and person are not well described
7. No, place and person are not well described
8. No, time, place, and person are not well described

CC. Was the intervention well described (when, how, who, where)?

1. Yes, when, how, who, and where are well described
2. No, when is not well described
3. No, how is not well described
4. No, who is not well described
5. No, where is not well described
6. No, when, how, who, and where are not well described
7. No, at least two are not well described

Sampling

CD. Did the authors specify the sampling frame or universe of selection for the study population?

1. No
2. Yes

CE. Did the authors specify the screening criteria for study eligibility?

1. No
2. Yes

CF. Was the population that served as the unit of analysis the entire eligible population or a probability sample at the point of observation?

1. Entire population
2. Probability sample
3. Convenience

CG. Are there other selection bias issues not otherwise addressed? (list)

Measurement

CH. Did the authors attempt to measure exposure to the intervention?

1. No (If no, skip to CK.)
2. Yes

CI. Was the exposure variable valid?

1. No
2. Yes

CJ. Was the exposure variable reliable?

1. No
2. Yes

CK. Were the outcome and other independent variables valid?

1. No
2. Yes

CL. Were the outcome and other independent variables reliable (consistent and reproducible)?

1. No
2. Yes

Analysis

Did the authors conduct appropriate analysis by:

CM. Conducting statistical testing (when appropriate)?

1. No
2. Yes

CN. Reporting which statistical tests were used?

1. No
2. Yes

CO. Controlling for design effects in the statistical model?

1. No
2. Yes

CP. Controlling for repeated measures in populations that were followed over time?

1. No
2. Yes

CQ. Controlling for different exposure to the intervention?

1. No
2. Yes

CR. Using a model designed to handle multilevel data when they included group-level and individual covariates in the model?

1. No
2. Yes

CS. Were there other problems with data analysis?

1. No
2. Yes (If yes, describe.)

Interpretation of Results

CT. Did at least 80 percent of enrolled participants complete the study?

1. No
2. Yes

CU. Did the authors assess whether the units of analysis were comparable prior to exposure to the intervention?

1. No
2. Yes

CV. Did the authors correct for controllable variables or institute study procedures to limit bias appropriately (e.g., randomization, restriction, matching, stratification, or statistical adjustment)?

1. No
2. Yes

CW. Check "yes" (i.e., code 2) and describe below all potential biases or unmeasured/contextual confounders described by the authors. Or check "no" (i.e., code 1) and describe other potential biases or unmeasured/contextual confounders not identified by the authors. For all responses, indicate the likely direction of effect on the results, if possible. If anything has not been covered, write it on the qualitative sheet.

1. No (describe)
2. Yes (describe)

CX-CZ. Which of the following feasibility and other key issues were addressed in the paper? To flag issues that might be of importance in describing the intervention or its implementation, indicate any of the following issues that are described by the authors. Particularly describe the ones you think might be important in the chapter we are developing. Use the following codes for CX (Key Issue 1), CY (Key Issue 2), and CZ (Key Issue 3). Code each and describe here.

1. Costs of the intervention (include monetary, nonmonetary, or human resources)
2. Potential harm of the intervention (include health and social consequences)
3. Other benefit
4. Implementation of the intervention
5. Barriers to implementation
6. Community acceptance or involvement in development or implementation of the intervention
7. Formation or use of existing coalitions to develop, implement, or evaluate intervention
8. Ethical constraints
9. Other

DA. In your opinion, is this article scientifically sound? Code from 1 to 5, with 5 being the best.

DB. Most important, does this article have something important to say? Code from 1 to 5, with 5 being the best.

Appendix B: Evaluations of Population-Based Interventions

References	Geographic Area and Year	Intervention	Eligibility Criteria and/or Source of Data	Study Design	Primary Outcome	Conclusions	Targeted Communities of Color
Albrecht, Higgins, & Lebow, 2000	Southwestern Pennsylvania, year not reported	Eight informative sessions on pregnancy and smoking, combined with peer support	71 pregnant teens aged 13 to 19, equal numbers of African Americans and Whites, drawn from school-based and hospital clinics assigned to two treatment arms (with and without peer support) and one control group	Three-arm randomized trial	Knowledge scores of effects of smoking during pregnancy measured at baseline and post intervention and whether teens quit smoking	Knowledge scores increased significantly and those who quit smoking had greater knowledge post intervention. Intervention group had higher scores. Intervention appeared successful in racially diverse sample.	Yes, sample equally split between African Americans and Whites
Bauer et al., 2000	Florida, 1998	Comprehensive youth-led program incorporating education, marketing, prevention, and enforcement activities	22,540, 20,978, and 23,745 students attending 255, 242, and 243 middle and high schools in Florida in 1998, 1999, and 2000, respectively	Longitudinal study	Changes in cigarette use status, intentions, and behaviors over a 2-year period as reported in self-administered questionnaires	On all scores, improvement was seen: fewer initiated smoking, cigarette use decreased, and prevalence of experimenting decreased.	No, includes students of color and analyzes data by race or ethnic group
Bauman et al., 2001	United States as a whole, 1997-1999	Family-directed program featuring mailed booklets and telephone contacts by health educators to prevent smoking and alcohol use by adolescents	1,316 adolescent-parent pairs in which adolescents were aged 12 to 14	Randomized trial of intervention versus no intervention	Onset of smoking, smokeless tobacco, and drinking measured in interviews at baseline, 3 months, and 12 months after program completion	Smoking onset was reduced by 16.4% at 1 year, with a 25.0% decrease for non-Hispanic Whites. No effect found for other races or ethnic groups evaluated as a single group.	No, analyzes data by race/ethnicity defined as non-Hispanic Whites versus all others
Biener, Harris, & Hamilton, 2000	Massachusetts in comparison to 40 other states and the District of Columbia, 1993	Comprehensive program including a $.25 sales tax on cigarettes to fund the program, a media campaign, services, and promotion of local policies	Pooled data from 40 states, excluding California but including the District of Columbia, that consistently participated in the Behavior Risk Factor Surveillance System (BRFSS)	Population-based trend analysis with concurrent comparison groups	Per capita consumption of cigarettes as measured by state sales tax records; prevalence of smoking in adults as measured by population-based telephone surveys	The $.25 per pack increase in the cigarette tax in MA in 1993 caused a 12% drop in cigarette use, compared with 4% in other states. MA continued to drop about 4% per year in contrast to 1% in other states.	No

Appendix B. Evaluations of Population-Based Interventions (continued)

References	Geographic Area and Year	Intervention	Eligibility Criteria and/or Source of Data	Study Design	Primary Outcome	Conclusions	Targeted Communities of Color
Biener, McCallum-Keeler, & Nyman, 2000	Massachusetts, 1993-1996	Media campaign with 66 ads over the span of 3 years	1,544 adults in Massachusetts who completed baseline and follow-up telephone surveys	Noncomparative study with pre/post design	Reported exposure to television ads and perceived effectiveness of nine specific ads	56% reported seeing ads at least once a week, with a mean effectiveness rating of 7.29 on a scale of 10. Ads eliciting strong negative emotions were most effective.	No
Clark et al., 2000	37 states and the District of Columbia,1997	Compliance checks conducted by the FDA for age restrictions on tobacco sales	110,062 compliance checks in unique establishments in 36 states in the United States and the District of Columbia	Cross-sectional, noncomparative study of administrative records	Illegal sale to minors at compliance checks; association of sales with age and sex of minors	Rate of illegal sales 26.6%. Failure to ask for proof of age strongly associated with illegal sale. Multivariate OR .03, CI .03–.04.	No
Fichtenberg & Glantz, 2000	California and the rest of the United States, 1980-1997	Comprehensive program including $.25 sales tax on cigarettes, aggressive media campaign, and community-based programs	Data on age-adjusted death rates from heart disease and population data from NCHS for United States and California, 1980-1997	Concurrent comparison group—rest of United States	Per capita cigarette consumption and mortality from heart disease	Between 1989 and 1992, cigarette consumption in CA declined by 2.72 packs per year more than rest of United States and 2.93 fewer deaths per 100,000 per year. Rate of decline 2.05 packs and 1.71 deaths after 1992 when program was cut back.	No
Hovell et al., 2000	San Diego County, California, date of intervention not reported	Counseling sessions for mothers based on shaping procedures, setting goals for reducing children's exposure, and signed contracts (seven sessions over 3 months versus nutritional counseling and some advice on ETS)	108 English- and Spanish-speaking mothers who smoked at least two cigarettes, exposing child under age 4 to smoke from at least one	Randomized trial	Children's exposure to environmental smoke from mothers and from all sources; cotinine concentrations in children's urine	Counseling was effective in reducing children's exposure to ETS. Appeared to be effective for both English- and Spanish-speaking mothers.	Yes, racially diverse, low-income area

References	Geographic Area and Year	Intervention	Eligibility Criteria and/or Source of Data	Study Design	Primary Outcome	Conclusions	Targeted Communities of Color
Jerome, Fiero, & Behar, 2000	Virginia, year not reported	Computerized scheduled program for gradually reducing and ceasing smokeless tobacco use	60 adult males who used smokeless tobacco daily and responded to ad for Study 1; 19 for Study 2	Noncomparative study	Study 1: abstinence rate biochemically validated at 3 and 12 months; Study 2: self-reported abstinence rate at end of treatment and 12 months	Study 1: abstinence rate was 29% at 3 months, 19% at 12 months. Study 2: abstinence rate was 56% at end of treatment and 11% at end of year.	No
Landrine, Klonoff, & Reina-Patton, 2000	California, 1994-1999	STAKE Act restricting sales to minors	72 small grocery/ convenience stores excluded from other studies—24 each in Black, White, and Hispanic communities	Longitudinal study of repeated measures done annually	Percentage of successful cigarette purchases over time, in different ethnic communities	Minors' access rate decreased from 41.2% in 1994 to 12.7% in 1998. Same stores were 3-5 times more likely to sell to minors before act than after act.	Yes
Litrownik et al., 2000	California, 1996-1997	Eight weekly, 2-hour sessions with parents attending three joint educational sessions to improve parent-child communication on tobacco and alcohol use	660 high-risk Hispanic teens and their families from 22 schools and 15 school districts	Randomized trial, pre/post design; intervention versus first aid/home safety educational sessions	Parental and adolescent perception of parent-child communication	Culturally sensitive, family-based intervention found to be effective in families with fewer children; 5% to 10% decrease in susceptibility for smaller families.	Yes
Maguire, McElnay, & Drummond, 2001	Northern Ireland and England, 1996	Structured counseling program by pharmacist for first 4 weeks, counseling as needed after that, and informational leaflet	100 pharmacies in Northern Ireland and 24 in London recruited through mailings and ads; 265 persons in intervention group and 219 in control group	Randomized trial; intervention versus usual care	Self-reported nonsmoking at 12 months and urine sample tested for cotinine	In the treatment group, 14.3% (38) were abstinent at 12 months compared with 2.7% (6) in the control group. Delivery of intervention problematic.	No

Appendix B. Evaluations of Population-Based Interventions (continued)

References	Geographic Area and Year	Intervention	Eligibility Criteria and/or Source of Data	Study Design	Primary Outcome	Conclusions	Targeted Communities of Color
Secker-Walker et al., 2000	Vermont and New Hampshire, 1989	Community organization approach to develop multicomponent tobacco control program; use of working groups for local planning; development of support systems; involvement of physicians, dentists, and dental hygienists; referral system	Adult women aged 18 to 64 (35,382 in two intervention counties and 34,480 in two demographically matched counties), two each in VT and NH; 6,800 women in cross-sectional evaluation surveys	Nonrandomized trial with comparison group, pre/post design	Smoking cessation, attitudes toward quitting smoking, perceptions of social support, norms, program recognition, availability of smoking cessation resources obtained through random digit dialed telephone surveys	In intervention counties, odds of a woman being a smoker after 4 years of program activities were .88 (95% CI, .78–1.0), perceptions were more negative, and the 5-year quit rate was significantly greater than in comparison counties (25.4% vs. 21.4%, P = .02).	No
Shiffman et al., 2000	United States as a whole, 1996	Computer-tailored materials—Committed Quitters Program (CQP)—offered to purchasers of nicotine polacrilex gum	Smokers who purchased nicotine polacrilex gum and called the CQP toll-free enrollment line: Arm 1 = 1,217 in CQP; Arm 2 = 1,207 in CQP plus outbound call; Arm 3 = 1,203 who received user's guide and audiotape	Three are randomized trial	28-day continuous abstinence assessed by telephone interview at 6 weeks, and 10-week abstinence rates assessed at 12 weeks into treatment	Abstinence rates identical for two intervention groups at both 6 and 10 weeks and both groups significantly higher than control group: CQP = 36.2% and 27.6%; CQP+call = 35.5% and 27.3%; control group = 24.7% and 17.7%.	No
Sly, Heald, & Ray, 2001	Florida and United States minus states with major tobacco control programs, 1998-1999	State anti-tobacco media campaign, television ads started in 1998 with theme of industry manipulation	Four cross-sectional telephone surveys of 12- to 17-year-olds in Florida (intervention, targeted N = 1,800) and two surveys of a comparable national sample in other states excluding AZ, CA, MA, OR (targeted N = 1,000)	Quasi-experimental	Comparison of 11 attitudes and beliefs about tobacco industry and three smoking behaviors measured via telephone interviews	Significant increases in ad-specific awareness, confirmed receptivity, and confirmed awareness. Florida youth had stronger anti-tobacco attitudes and better behavioral patterns than comparison group.	No

Appendix B. Evaluations of Population-Based Interventions (continued)

References	Geographic Area and Year	Intervention	Eligibility Criteria and/or Source of Data	Study Design	Primary Outcome	Conclusions	Targeted Communities of Color
Sly et al., 2001	Florida, 1999	Short-term effects of Florida "truth" campaign: aim to empower young people; 12 ads shown during first 10 months; showed tobacco industry and executives as predatory, profit hungry, and manipulative	Names randomly selected from 12- to 17-year-olds who participated in Florida Anti-Tobacco Media Evaluation (N = 1,820)	Prospective cohort study with pre/post design	Media effect index, smoking initiation, and the association between the two measures	Youths scoring at intermediate and high levels on the media effect index were less likely to initiate smoking than youths who could not confirm awareness of television ads.	No

Note: FDA = Food and Drug Administration; ETS = environmental tobacco smoke; NCHS = National Center for Health Statistics; OR = odds ratio; CI = confidence interval.